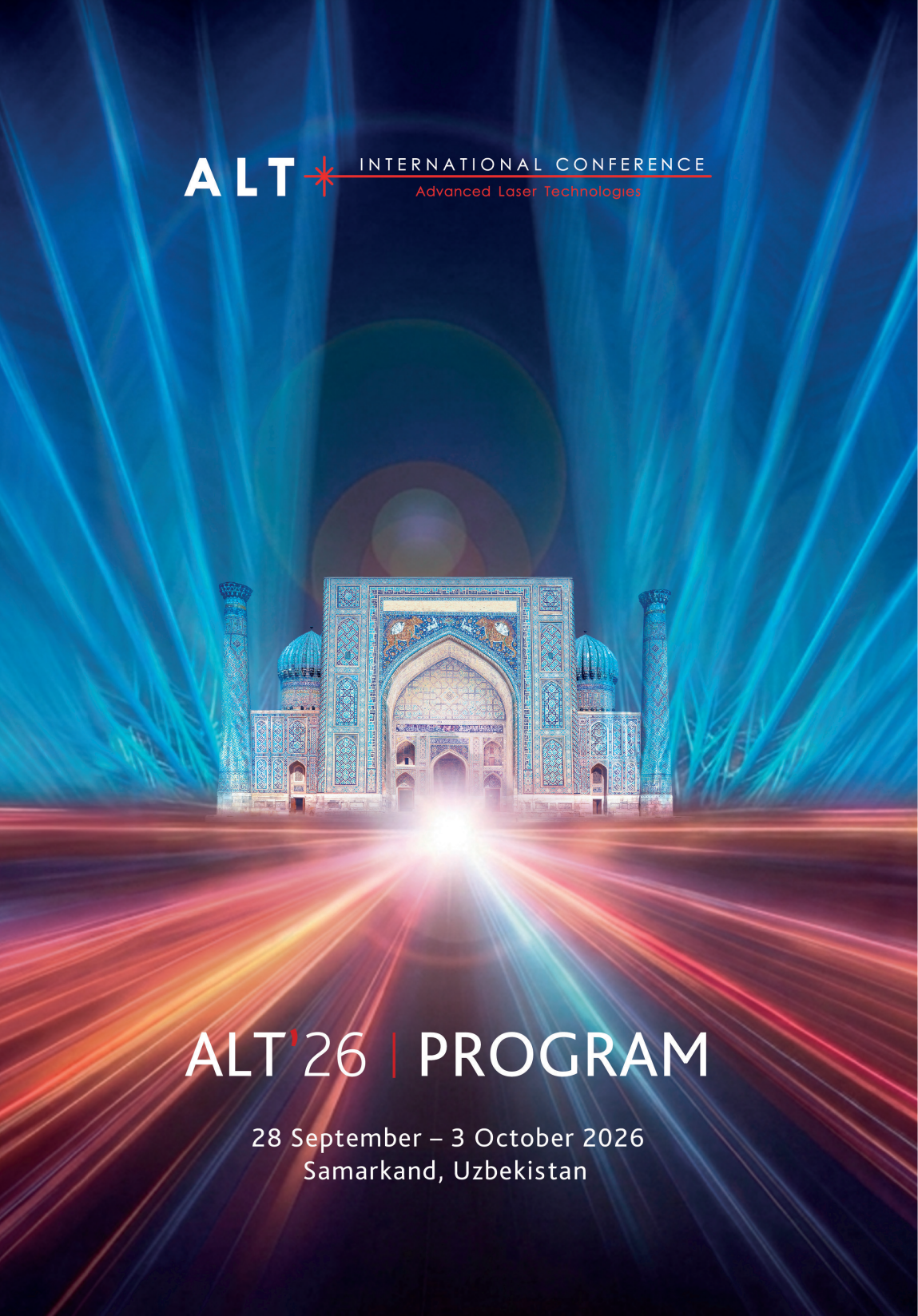




ALT * INTERNATIONAL CONFERENCE
Advanced Laser Technologies

ALT'26 | PROGRAM

28 September – 3 October 2026
Samarkand, Uzbekistan

ORGANIZERS AND SPONSORS



GPI RAS

Prokhorov General Physics
Institute of the Russian
Academy of Sciences (GPI RAS)



Samarkand State University
named after Sharof Rashidov



Department of Physical
Sciences of the Russian
Academy of Sciences



Engineering Physics Institute



Center of Laser Technology
and Material Science



Lomonosov Moscow State
University



National Research Nuclear
University MEPhI (Moscow
Engineering Physics Institute)



ICO



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TECHNICAL SUPPORT



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33RD INTERNATIONAL
CONFERENCE ON ADVANCED
LASER TECHNOLOGIES
(ALT'26)

PROGRAM

Samarkand, Uzbekistan,
28 September – 3 October 2026

Фемтосекундные твердотельные лазеры



TiF

Ti:S лазер

- λ range: 690-1040 нм
- τ pulse: 6 фс - 30 пс
- P_{av} : до 4 Вт
- PRR: 40...125 МГц

TeMa

иттербиевый лазер

- λ : 1030...1054 / 525 нм
- τ pulse: 15-150 фс
- P_{av} : >20 Вт / >8 Вт
- PRR: 10-80 МГц

CrF

Cr:F лазер

- λ range: 1230-1270 нм
- τ pulse: <70 фс
- P_{av} : до 1 Вт
- PRR: 75...125 МГц

Katyusha

многоканальная система

- λ : 525 / 740-860 / 1050 нм
- τ pulse: 50 фс - 30 пс
- P_{av} : 2 Вт на 800 нм
- PRR: 80 МГц

TOPOL

ОПО с накачкой

- λ range: 205-4750 нм
- τ pulse: <150 фс
- P_{av} : >3 Вт
- PRR: 80 МГц

Фемтосекундные волоконные лазеры



YFOA(-X)

иттербиевый лазер

- λ : 1030...1100 нм
- τ pulse: <200 фс (30 фс)
- P_{av} : до 50 Вт
- PRR: 40...80 МГц

ANTAUS

микроджоульный

- λ : 1030...1053 нм
- τ pulse: <250 фс
- E_{pulse} : до 60 мкДж
- P_{av} : до 50 Вт

PERL, EFO

эربيевые лазеры

- λ : 1560 нм
- τ pulse: 50...300 фс; 5 пс
- P_{av} : до 5 Вт
- PRR: 30...250 МГц

EFOA-SH/PERL-PM-SH

эربيевый лазер

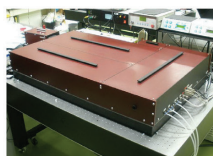
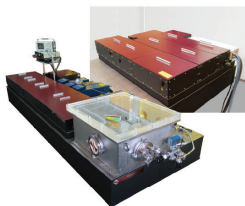
- λ : 1560/780 нм
- τ pulse: <50 фс
- P_{av} : >2 Вт
- PRR: 30...250 МГц

EFO-COMB

комб-генератор

- λ : 200...3390 нм
- F_{rep} : 100-250 МГц
- Стаб.: $1 \cdot 10^{-17}$ на 1 с

Усилители



AVET и REUS

титан-сапфировые усилители

- λ : 740...950 нм
- τ pulse: <35 фс (опция <8 фс)
- P_{peak} : до 20 ТВт
- E_{pulse} : >550 мДж@10 Гц

TETA иттербиевый усилитель

- λ : 1030/515/343/257 нм
- τ pulse: <180 фс (опция <30 фс)
- P_{av} : до 50 Вт
- E_{pulse} : до 2 мДж

FREGAT хром-форте-

ритовый усилитель

- λ : 1240 нм
- τ pulse: <100 фс
- E_{pulse} : до 100 мДж
- PRR: 10 Гц...1 кГц

PARUS

параметрический усилитель

- λ range: 190 нм - 15 мкм
- τ pulse: от <30 фс
- Eff. S-I: >10% от накачки

Непрерывные твердотельные лазеры



TiC Ti:S лазер

- λ : 690-1040 нм
- P_{av} : до 6 Вт
- <100 кГц ширина линии

TEMA-CW

- λ : 1010-1070 нм
- P_{av} : до 15 Вт
- USB

LF-100 Cr:F лазер

- λ : 1210-1290 нм
- P_{av} : до 1 Вт
- USB

DLS одночастотный диодный

- лазерный источник
- λ : 400...1670 нм
- P_{av} : до 10 Вт



ABESTA

ЛАЗЕРЫ И ОПТИЧЕСКИЕ СИСТЕМЫ



ООО «ABESTA», ул. Физическая, 11
Троицк, 108840, Москва, Россия
Тел.: +7 (495) 138-99-56

fs@avesta.ru
<https://avesta.ru>

Диагностическое оборудование



AA-DD и IRA

сканирующие автокорреляторы

- λ range: 420 нм - 11 мкм
- τ pulse: 10 фс - 250 пс
- Чувствительность: от 100 мВт²
- USB и ПО для Windows

ASF, ASF-FROG

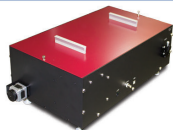
одноимпульсные автокорреляторы и FROG

- Диапазон длин волн: 400-2200 нм
- Диапазон длительности: 5 фс - 20 пс
- USB, ПО для Windows и LabView

SPIDER

измеритель спектральной фазы

- Input λ : 550-2200 нм
- Input τ pulse range: 5-320 фс
- USB и ПО для Windows



COMET измеритель контраста

- Диапазон длин волн: 700-1500 нм
- Динамический диапазон: 10^{10}
- Временной диапазон: до 10 нс
- USB и ПО для Windows

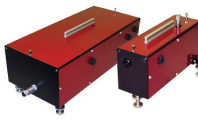
OD фотоприемники

- Диапазон длин волн: 200-2600 нм
- Полоса до 2500 МГц
- Время нарастания от 0.5 нс
- Со смещением, с усилителем, лавинные, волоконные

Спектрометры и сенсоры

- λ : 190-3450 нм
- Разрешение: от 0.01 нм
- Волоконный/free-space
- USB и ПО для Windows

Компоненты



OG ЭО и АО селекторы импульсов

- Длины волн: 210...2700 нм
- Выходная частота: до 40 МГц
- Пропускание >90%
- Контраст >2 000:1
- Блок генерации задержек
- USB, ПО для Windows и LabView

ALock. Блок ФАПЧ

- Входной сигнал до 3 ГГц
- Полоса ПИД до 2 МГц
- PZT до 50 Вт
- Синхронизация лазеров
- Стабилизация CEP
- ASOPS, THz-ASOPS

AG генераторы гармоник

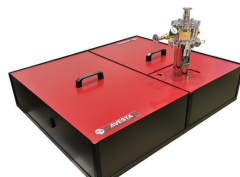
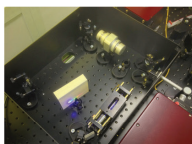
- Выход: 195 нм - 5 мкм
- ЧГ на 800 нм = ТГ+основная
- Преобразование: до >50%

APC призмный компенсатор

- GVD на 800 нм:
- от +16500 фс² до -13800 фс²

Compulse компрессор

- 6 фс, 500 мкДж на 800 нм
- 30 фс, 200 мкДж на 1030 нм



OA оптические аттенюаторы

- Динамический диапазон: 10^2
- λ : 250...2000 нм
- Модели с низкой дисперсией
- Порог пробоя: до 10 Дж/см²

AF ротаторы и изоляторы

- λ : 400...1250 нм
- Изоляция: >38 dB; >60 dB
- Широкопол. и перестраив.
- Апертура: до 20 мм
- Порог пробоя: до 5 Дж/см²

GECON генератор

- суперконтинуума
- Вх. λ : 800; 1030-1064 нм
- Вых. λ : 200-1200 нм
- Преобразование: >50%

Tera-Ax ТГц генератор

- Центр. частота: 1 ТГц
- Длительность ТГц: <1 пс
- Энергия ТГц: >1 мДж
- ЭО детектор (опция)
- Версия с криостатом

• чопперы • шаттеры • USB контроллеры • оптомеханика • столики • оправы •



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rev 2603

KYANITE

High-Power Industrial UV Lasers



- Output energy up to **55 W at 355 nm**
- Pulse repetition rate **up to 300 kHz**
- Beam quality **TEM00; $M^2 < 1,2$**
- High beam stability **$\leq 3\%$**
- Service interval **> 10 000 hours**
- Built-in energy meter
- Produced in the Republic of Belarus



Easy to Operate · Highly Reliable · Warranty & Support

KYANITE lasers are powerful diode-pumped solid-state (DPSS) lasers that generate nanosecond pulses at repetition rates **up to 300 kHz** in the ultraviolet (**355 nm**) and visible (**532 nm**) spectral ranges.

The combination of high average power, excellent beam quality, output parameter stability, and long operating lifetime makes KYANITE lasers an effective tool for high-precision industrial micromachining.

KYANITE lasers are the perfect choice for precision PCB processing, silicon wafer micromachining, thin-film patterning, and glass or ceramic processing. They deliver outstanding results in polymer cutting and marking, microelectronics manufacturing, and high-precision industrial engraving. Powered by 355 nm UV light, these lasers ensure highly efficient absorption across a vast range of materials while keeping the heat-affected zone (HAZ) to minimum.

Built with unique engineering solutions, KYANITE lasers offer enhanced, long-term stability of output parameters and exceptional durability in harsh industrial environments.

The compact dimensions of both the laser head and the power supply ensures seamless integration into automated production lines and specialized laser systems.

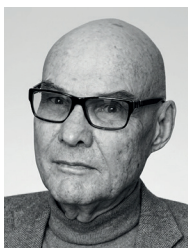
For more information please contact our specialists via email or phone.

33rd International Conference on Advanced Laser Technologies (ALT'26) will be held in Samarkand, Uzbekistan, 28 September – 3 October 2026.

Following on from previous ALT editions, the ALT'26 conference aims to bring together presentations on fundamental as well as applicative aspects of innovative laser technologies along with their scientific and hi-tech industrial applications. Fundamental topics include laser-matter interaction, photonics, nonlinear optics, plasmonics, physical optics, etc. Applicative topics include material laser processing and writing of surface and bulk modification and functionalization, high- power and/or high repetition rate lasers, biomedical laser applications, optical materials, etc.

COMMITTEES

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Ivan SHCHERBAKOV

Academician of the RAS, scientific director of the Institute of General Physics named after. A. M. Prokhorov RAS, professor and head of the Department of Laser Physics, Faculty of Physics and Energy Problems, Moscow Institute of Physics and Technology.

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Mukhsin ASHUROV

Academician of the Academy of Sciences of the Republic of Uzbekistan, foreign member of the RAS, Institute of Nuclear Physics, Tashkent, Uzbekistan

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Samarkand State University, Uzbekistan

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Engineering Physics Institute, Samarkand State University

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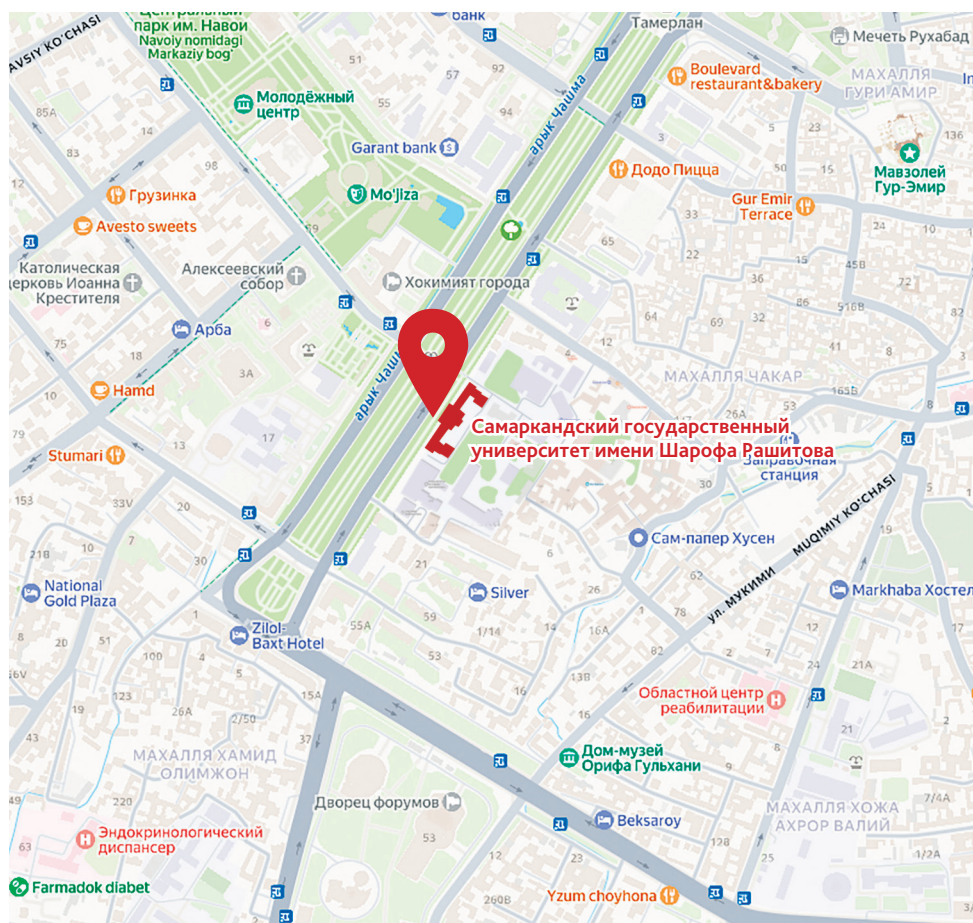
Phone: +7 499 503-87-77, add 2-96

VENUE

Conference ALT'26 will be held in the Samarkand State University named after Sharof Rashidov, University bld. 15, Samarkand.



www.samdu.uz/en



SECTIONS

• LASER-MATTER INTERACTION

Co-chairs:

Sergey Klimentov (*MEPHI University, Moscow*)

Ekaterina Barmina (*GPI RAS, Moscow*)

• BIOMEDICAL PHOTONICS

Co-chairs:

Alexander Priezzhev (*Lomonosov MSU, Moscow*)

Andrey Lugovtsov (*Lomonosov MSU, Moscow*)

• LASER SYSTEMS AND MATERIALS

Co-chairs:

Boris Denker (*Prokhorov GPI RAS, Moscow*)

Grigorii Sokolovskii (*Ioffe Institute, Saint Petersburg*)

Alexey Gladyshev (*Dianov Fiber Optics Research Center, Moscow*)

• LASER DIAGNOSTICS AND SPECTROSCOPY

Co-chairs:

Leonid Golovan (*Lomonosov MSU, Moscow*)

Alexander Milekhin (*Rzhanov Institute of Semiconductor Physics, Novosibirsk*)

• NONLINEAR AND TERAHERTZ PHOTONICS

Co-chairs:

Alexander Shkurinov (*Lomonosov MSU, Moscow*)

Vladimir Makarov (*Lomonosov MSU, Moscow*)

• PHOTONICS AND QUANTUM TECHNOLOGIES

Co-chairs:

Andrei Naumov (*Lebedev Physical Institute, RAS, Moscow*)

Sergei Kulik (*Lomonosov MSU, Moscow*)

• NANOPHOTONICS

Co-chairs:

Igor Vlasov (*Prokhorov GPI RAS, Moscow*)

Aleksander Kuchmizhak (*FEFU, Vladivostok*)

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SECTION COLOR SCHEME

Laser-Matter Interaction
Biomedical Photonics
Laser Systems and Materials
Laser Diagnostics and Spectroscopy
Nonlinear and Terahertz Photonics
Photonics in Quantum Technologies
Nanophotonics

PROGRAMME OVERVIEW

Sunday, 27 September 2026				
17:00-19:00	Registration			
Monday, 28 September 2026				
9:00-10:00	Registration			
10:00-10:15	ALT`26 Opening ceremony			
10:15-11:00	Plenary session 1			
11:00-11:20	Coffee break			
11:20-12:05	Plenary session 2			
12:05-12:50	Plenary session 3			
13:00-14:30	Lunch			
	Room 1	Room 2	Room 3	Room 4
14:30-16:25	Laser-Matter Interaction	Biomedical Photonics Session 1. Laser diagnostics & Optical clearing	Laser Systems and Materials	Photonics in Quantum Technologies
	Chair: S. Klimentov	Chair: A. Priezhev	Chair: A. Gladyshev	Chair: A. Naumov
16:25-16:40	Coffee break			
16:40-19:05	Laser-Matter Interaction	Biomedical Photonics Session 2. Laser diagnostics & Optical clearing	Laser Systems and Materials	Photonics in Quantum Technologies
	Chairs: E. Barmina, N. Inogamov	Chair: A. Lugovtsov	Chair: M.Melkumov	Chair: A. Naumov
19:30-21:30	Wellcome party			
20:30	Program Committee			

Tuesday, 29 September 2026				
09:00-09:45	Plenary session 4			
09:45-10:30	Plenary session 5			
10:30-11:00	Coffee break			
	Room 1	Room 2	Room 3	Room 4
11:00-13:05	Laser-Matter Interaction Chairs: F. Potemkin A. Povolotskiy	Biomedical Photonics Session 3. OCT & OCE & OAT Chair: V. Tuchin	Laser Systems and Materials Chair: S. Turitsyn	Photonics in Quantum Technologies Chair: A. Naumov
13:05-14:30	Lunch			
	Room 1	Room 2	Room 3	Room 4
14:30-16:20	Laser-Matter Interaction Chairs: D. Sinev, A. Dostovalov	Biomedical Photonics Session 4. Laser & Photodynamic therapy Chair: E. Genina	Laser Systems and Materials Chair: S. Babin	Nanophotonics Chair: I. Vlasov
16:20-16:40	Coffee break			
16:40-19:00	Poster Section			

PROGRAMME OVERVIEW

Wednesday, 30 September 2026				
09:00-09:45	Plenary session 6			
09:45-10:30	Plenary session 7			
10:30-11:00	Coffee break			
	Room 1	Room 2	Room 3	Room 4
11:00-13:05	Laser-Matter Interaction Chairs: A. Kucherik G. Tselikov	Nonlinear and Terahertz Photonics Chair: A. Shkurinov	Laser Systems and Materials Chair: N.Kostyukova	Nanophotonics Chair: I. Vlasov
13:05-14:30	Lunch			
15:00-18:00	Social Program			
19:00-22:00	Conference Dinner			

Thursday, 01 October 2026				
09:00-09:45	Plenary session 8			
09:45-10:30	Plenary session 9			
10:30-11:00	Coffee break			
	Room 1	Room 2	Room 3	Room 4
11:00-13:05	Laser Diagnostics and Spectroscopy Chairs: T. Dolenko, D. Zhigunov	Biomedical Photonics Session 5. Laser measurements and Nanoparticles Chair: V. Zaitsev	Nonlinear and Terahertz Photonics Chair: A. Shkurinov	Nanophotonics Chair: A. Kuchmizhak
13:05-14:30	Lunch			
14:30-16:00	Laser Diagnostics and Spectroscopy Chairs: A. Milekhin, A. Novikov	Biomedical Photonics Session 6. Laser tissue interaction Chair: C.-L. Cheng	Nonlinear and Terahertz Photonics Chair: S.Stremukhov	Laser-Matter Interaction Chairs: S. Klimentov
16:00-16:20	Coffee break			
16:20-18:30	Laser Diagnostics and Spectroscopy Chair: V. Pavlov	Biomedical Photonics Session 7. Fluorescence/ FLIM Chair: V. Shcheslavskiy	Round table discussion “Scientific aspects of development a terahertz component base” Chairs: A. Shkurinov, S. Stremukhov	Nanophotonics Chair: I. Vlasov

PROGRAMME OVERVIEW

Friday, 02 October 2026			
09:00-09:45	Plenary session 10		
09:45-10:30	Plenary session 11		
10:30-11:00	Coffee break		
	Room 1	Room 3	Room 4
11:00-13:40	Laser Diagnostics and Spectroscopy Chairs: N.Tchernega, S.Dyakov, R.Vasiliev	Nonlinear and Terahertz Photonics Chair: A. Shkurinov	Nanophotonics Chair: A. Kuchmizhak
14:00-14:15	Presentation of ALT`27		
14:15-14:30	Closing ceremony		

PLENARY

**Anvar A. Zakhidov**

UTD-NanoTech Institute, University of Texas at Dallas
Perovskite Quantum Dots for Lasing in Photonic Chips

**Edik Rafailov**

Aston University, UK
Progress in the development of efficient Quantum Dot
based room
temperature THz sources

**Yiming Zhu**

University of Shanghai for Science and Technology, China
Terahertz SNOM Technology and Its Applications

**Valentyn Volkov**

Founder, Chief Technical Officer XPANCEO
Quasi-2D gold for next-generation nanophotonics

**Sergey Deyev**

National Research Center "Kurchatov Institute",
Lebedev Physical Institute RAS, Russia
Institute of Bioorganic Chemistry, Russia

Innovative technologies for targeted irradiation of
deep-seated tumors

**Stephan Barcikowski**

Technical Chemistry I, Research Center Active Sites, Uni-
versity of Duisburg-Essen, Germany

Fundamentals, Throughput Breakthroughs, and Applica-
tions of Laser-Generated Nanoparticles in Liquids

**Vladislav Shcheslavskiy**

Privolzhskiy Research Medical University, Russia
Becker&Hickl GmbH, Germany

Time-resolved fluorescence spectroscopy and imaging:
applications and clinical relevance

**Victor Ral'chenko**

Prokhorov General Physical Institute RAS, Russia

CVD diamond for lasers and photonics: growth, properties,
treatment, examples of applications

**Pablo Loza-Alvarez**

ICFO - The Institute of Photonic Sciences, Spain

Novel approaches to the super-resolved microscopy - TBC

**Weiwei Liu**

Institute of Modern Optics, Nankai University

Femtosecond Filament Remote Sensing

**Irina Zavestovskaya**

National Research Center "Kurchatov Institute",
Lebedev Physical Institute RAS, Russia

Advanced Technologies of Nuclear Medicine
and Radiology

Sunday, 27 September 2026

17:00-19:00	Registration
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Monday, 28 September 2026

9:00-10:00	Registration
10:00-10:15	ALT`26 Opening ceremony
10:15-11:00	Plenary session 1: Zakhidov Anvar <i>NanoTech Institute, The University of Texas at Dallas and Samarkand State University</i> Quantum Dots for Advanced Lasing Nanophotonics and Optoelectronics
11:00-11:20	Coffee break
11:20-12:05	Plenary session 2: Liu Weiwei <i>Institute of Modern Optics, Nankai University</i> Femtosecond Filament Remote Sensing
12:05-12:50	Plenary session 3: Volkov Valentyn <i>XPANCEO</i> Quasi-2D gold for next-generation nanophotonics
13:00-14:30	Lunch

	Room 1		Room 2
14:30-16:15	Laser-Matter Interaction <i>Chairs: Klimentov Sergei</i>	14:30-16:20	Biomedical Photonics Session 1. Laser diagnostics & Optical clearing <i>Chair: Priezzhev Alexander</i>
14:30-14:50	Konov Vitaliy (invited) <i>Prokhorov General Physics Institute of the Russian Academy of Sciences</i> Formation of surface atomic scale structures by multi-pulsed laser induced diamond photochemical etching and thin film coating	14:30-14:50	Tuchin Valery (invited) <i>Saratov State University</i> Breakthrough benefits of laser biomedical technologies thanks to tissue optical clearing



	Room 3		Room 4
14:30-16:25	Laser Systems and Materials <i>Chair: Gladyshev Alexey</i>	14:30-16:20	Photonics in Quantum Technologies <i>Chair: Naumov Andrey</i>
14:30-14:50	Fotiadi Andrei (<i>invited</i>) <i>Ulyanovsk state university</i> Self-injection locking stabilization mechanisms in low-noise CW and pulsed fiber laser configurations	14:30-14:50	Kovalyuk Vadim (<i>invited</i>) <i>National University of Science and Technology MISIS</i> Waveguide-Integrated Superconducting Nanowire Single-Photon Detectors: From Technology to Hybrid Platforms

14:50-15:10	Kulchin Yury (<i>invited</i>) <i>Institute of Automation and Control Processes FEB RAS</i> New innovative technologies for laser additive manufacturing based on artificial intelligence	14:50-15:10	Cheng Chia-Liang (<i>invited</i>) <i>Department of Physics, National Dong Hwa University</i> Molecular Signatures of Early Multicellularity in Yeast: From Single Cells to Multicellular Clusters
15:10-15:30	Farsari Maria (<i>invited</i>) <i>Forth/IESL</i> Micro and Nano 3D Printing Using Light	15:10-15:30	Genina Elina (<i>invited</i>) <i>Optics and Biophotonics Department, Saratov State University</i> Skin optical clearing: an innovative approach to cancer diagnostics
15:30-15:45	Aiyyzhy Kuder <i>Prokhorov General Physics Institute of the Russian Academy of Sciences</i> Controlling the Allotropic State of Boron and Selenium Nanoparticles by Nanosecond Laser Fragmentation in Liquids	15:30-15:45	Lugovtsov Andrei <i>Physics Department, M.V. Lomonosov Moscow State University</i> Application of radiopaque and magnetic resonance agents for optical clearing of nail bed skin
15:45-16:00	Syuy Alexander <i>Moscow Institute of Physics and Technology (National Research University)</i> Laser synthesis of amorphous PdSe _{2-x} for high-performance photonics, catalysis and photothermal applications	15:45-16:00	Badgujar Pooja Manik <i>National Dong Hwa University</i> From a label-free photonic signature to molecular identity: MALDI-TOF assignment of the chromophore of evolved multicellularity in snowflake yeast

14:50-15:10	Melkumov Mikhail (<i>invited</i>) Dianov FORC (GPI RAS) Cladding-pumped Bismuth-doped Fiber Lasers and Amplifiers: Current Status and Future Perspectives	13:40-14:00	Gippius Nikolay (<i>invited</i>) Skolkovo Institute of Science and Technology Resonant subspace method for composite photonic crystal systems
15:10-15:25	Zhukov Leonid Perm State University Scattering lensed optical fibers with a concave end surface obtained by volumetric chemical etching	15:10-15:30	Kundikova Nataliya (<i>invited</i>) The Institute of Electrophysics of the Ural Branch of the Russian Academy of Sciences Optical Magnus Effect and Spin-Orbit Interaction of Light – 35 Years from the First Publication
15:25-15:40	Gervaziev Mikhail Novosibirsk State University Supercontinuum generation in GRIN MM fiber: nonlinear dynamics of modal content	15:30-15:45	Stremoukhov Sergey Lomonosov Moscow State University Ion trap based coupled quantum memristors for creating neural networks and reservoir computing
15:40-15:55	Kashirina Ekaterina Institute of Automation and Electrometry, Siberian Branch of the Russian Academy of Sciences, 1 Ac. Koptug Ave., Novosibirsk 630090, Russia Simplified design of vibration-induced sweeping Erbium doped fiber laser	15:45-16:00	Paterova Anna South Ural State University Novel nonlinear crystals for mid-infrared quantum metrology

16:00-16:15	Tikhonowski Gleb <i>Emerging Technologies Research Center, XPANCEO, Dubai Investment Park First, Dubai, United Arab Emirates</i> Laser-synthesized spherical Ti_3C_2 mxene nanoparticles for in vivo photothermal therapy of cancer	16:00-16:20	Kiseleva Elena (invited) <i>Privolzhsky Research Medical University</i> Interrogation of the urethral tissues by multimodal optical and acoustic approaches
16:25-16:40	Coffe break		
16:40-19:05	Laser-Matter Interaction <i>Chairs: Barmina Ekaterina, Inogamov Nail</i>	16:40-18:35	Biomedical Photonics Session 2. Laser diagnostics & Optical clearing <i>Chair: Lugovtsov Andrei</i>
16:40-17:00	Kuchmizhak Aleksandr (invited) <i>Institute of Automation and Control Processes, Far Eastern Branch, Russian Academy of Science</i> Ablation-free pulsed laser nanotexturing for photonics and optoelectronics	16:40-17:00	Cherkasova Olga (invited) <i>Institute of Automation and Electrometry of the Siberian Branch of the Russian Academy of Sciences, Novosibirsk, Russia</i> Potential of Terahertz Sensing for diagnostics
17:00-17:20	Fojtik Anton (invited) <i>Czech Technical University in Prague, Faculty of Biomedical Engineering</i> Pioneering pulsed laser synthesis of colloids	17:00-17:20	Nikitin Petr (invited) <i>Prokhorov General Physics Institute of the Russian Academy of Sciences,</i> Complementary optical and magnetic detection of cancer and cardiovascular biomarkers: from binding kinetics to non-invasive picogram-level quantification in saliva

15:55-16:10	Sokolov Anton <i>Mendeleev University of Chemical Technology of Russia</i> Picosecond high-frequency laser based on a regenerative amplifier for optical-laser systems	16:00-16:20	Vladimir Pankratov (invited) <i>Institute of Solid State Physics, University of Latvia</i> Synchrotron Radiation in Photonic Materials Research: Electronic Excitations, Defects, and Ultrafast Processes
16:10-16:25	Yuriy Gladush <i>Skolkovo Institute of Science and Technology</i> Optical Frequency Comb Generation in Fiber Lasers with an Integrated High-Q Resonator		
16:40-19:00	Laser Systems and Materials <i>Chair: Melkumov Mikhail</i>	16:40-18:40	Photonics in Quantum Technologies <i>Chair: Naumov Andrey</i>
16:40-17:00	Koltashev Vasily (invited) <i>Prokhorov General Physics Institute of the Russian Academy of Sciences, Dianov Fiber Optics Research Center, Moscow, Russia</i> 5- μm terbium fiber laser with Bragg grating	16:40-17:00	Mantsevich Vladimir (invited) <i>Lomonosov Moscow State University</i> Ultimate photon entanglement in biexciton cascade
17:00-17:20	Smirnov Alexander (invited) <i>Kotelnikov Institute of Radioengineering and Electronics of RAS</i> The peculiarities of heavily erbium-doped fiber lasers for extended L-band operation	17:00-17:20	Davaasambu Jav (invited) <i>Institute of Physics and Technology, Mongolian Academy of Sciences</i> Structural, electronic and optical properties of rare-earth-doped LiYF_4

17:20-17:40	Spellaue Maximilian <i>(invited)</i> <i>Laser Center HM, Munich University of Applied Sciences HM</i> Enhanced Efficiency and Improved Nanoparticle Size Control in Laser Ablation of Gold in Water by GHz-Burst Irradiation	17:20-17:40	Semyachkina-Glushkovskaya Oxana <i>(invited)</i> <i>Saratov State University</i> Neurolymphaphotonics for revolutionary technologies of preventive medicine
17:40-18:00	Inogamov Nail <i>(invited)</i> <i>L.D. Landau Institute for Theoretical Physics of Russian Academy of Sciences</i> A new type of optoacoustic metamaterial and elastoplastic phenomena associated with weak nanosecond pulses	17:40-18:00	Oliveira Luis <i>(invited)</i> <i>Physics Department, School of Engineering, Polytechnic of Porto</i> Laser measurement of the anomalous dispersion of dura mater
18:00-18:20	Dadadzhanov Daler <i>(invited)</i> <i>ITMO University/Tel-Aviv University</i> Engineering chiral metal nanostructures via continuous and pulsed laser irradiation	18:00-18:20	Plekhanov Anton <i>(invited)</i> <i>Privolzhsky Research Medical University</i> Multimodal OCT-based Approaches for Diagnosis in Critical Care and Oncology
18:20-18:35	Cheng Yuzhu <i>Novosibirsk State University</i> Ultrashort-Pulse Laser Crystallization of a-Ge:H Films and a-Ge/a-Si Nanolayers: The Role of Pulse Duration and Non-Thermal Mechanisms	18:20-18:35	Vladimirov Alexander <i>1-/9E.S. Gorkunov Institute of Engineering Science of the Ural Branch of the Russian Academy of Sciences</i> Dynamic speckle diagnostics of biological and technical objects: new objects and new results

17:20-17:40	Sverchkov Sergei (<i>invited</i>) <i>Prokhorov General Physics Institute of RAN</i> Pump mechanisms of 5÷6 μm Nd^{3+}: fiber lasers	17:20-17:40	Plakhotnik Taras (<i>invited</i>) <i>School of Mathematics and Physics, The University of Queensland</i> Intracellular Nanothermometry: Quantum Sensors, Physical Limits and Microscopic Heat-Transport Models
17:40-17:55	Poddubrovskii Nikita <i>Institute of automation and electrometry of the Siberian Branch of the Russian Academy of Sciences</i> Effect of standing wave visibility on the fiber laser generation regime	17:40-17:55	Sokolov Victor <i>NRC "Kurchatov Institute"</i> Laser formation of high-speed integrated optical devices using fluorinated polymer and nano-materials
17:55-18:15	Turitsyn Sergei (<i>invited</i>) <i>Aston Institute of Photonic Technologies, Aston University</i> New applications of semiconductor optical amplifier multimode fiber laser	17:55-18:10	Kalashnikov Dmitry <i>Russian Quantum Center</i> Spectral matching the modes of the multimode squeezed light with the broadened by microstructured fiber local oscillator
18:15-18:30	Romanova Elena <i>Saratov State University</i> Mid-infrared photoluminescence in a core-clad chalcogenide fiber doped with terbium ions	18:10-18:25	Kunets Maxim <i>Russian Quantum Center</i> Efficient phase encoding of arbitrary interactions in a spatial photonic Ising machine

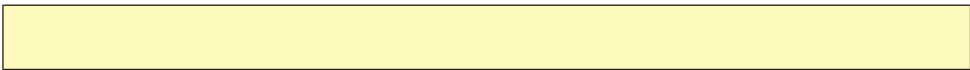
18:35-18:50	Mareev Evgenii <i>NRC "Kurchatov Institute"</i> High-repetition-rate time-resolved X-ray diffraction for probing laser-induced structural dynamics		
18:50-19:05	Pham Tri <i>Joint Institute for Nuclear Research (JINR)</i> Plasmon-enhanced up-conversion photoluminescence in NaGdF4: Yb, Er nanoparticles using plasmonic gold dendritic nanostructures		
19:30-21:30	Wellcom party		
20:30	Program Committe		

18:30-18:45	Tkachenko Alina <i>Institute of Automation and Electrometry, Siberian Branch of the Russian Academy of Sciences</i> Vibration-induced frequency sweeping in a Yb-doped fiber laser	18:25-18:40	Reznikov Konstantin <i>AVESTA Ltd.</i> Increasing the modulation instability threshold in a direct-diode-pumped Kerr-lens mode-locked Ti:Sa oscillator
18:45-19:00	Akentev Aleksandr <i>Joint-stock Company "Receach and Production Corporation "Precision Systems and instruments"</i> Polarization analysis of quantum-optical systems for satellite laser ranging		

Tuesday, 29 September 2026

9:00-9:45	Plenary session 4: Rafailov Edik <i>Aston University</i> Progress in the development of efficient Quantum Dot based room temperature THz sources
9:45-10:30	Plenary session 5: Shcheslavskiy Vladislav <i>Privolzhsky Research Medical University</i> Time-resolved fluorescence spectroscopy and imaging: applications and clinical relevance
10:30-11:00	Coffee break

	Room 1		Room 2
11:00-13:05	Laser-Matter Interaction <i>Chairs: Potemkin Fedor, Povolotskiy Alexey</i>	11:00-13:00	Biomedical Photonics Session 3. OCT & OCE & OAT <i>Chair: Tuchin Valery</i>
11:00-11:20	Skoulas Evangelos (invited) <i>Swiss Federal Laboratories for Materials Science and Technology (EMPA)</i> Diffraction-Limited Dynamic Beam Shaping for Advancing Laser Materials Processing	11:00-11:20	Larin Kirill (invited) <i>University of Houston</i> Optical Coherence Elastography and Brillouin Spectroscopy for Tissue Biomechanics
11:20-11:40	Potemkin Fedor (invited) <i>Lomonosov Moscow State University</i> Table-top generation of ultra-broadband coherent radiation: a unified source from soft x-rays to terahertz and its transformative role in modern photonics	11:20-11:40	Zaitsev Vladimir (invited) <i>A.V. Gaponov-Grekhov Institute of Applied Physics of the Russian Academy of Sciences</i> Real-time determination of substances penetration and associated skin dehydration using OCT-based osmotic-strain imaging



	Room 3		Room 4
11:00-13:05	Laser Systems and Materials <i>Chair: Turitsyn Sergei</i>	11:00-12:55	Photonics in Quantum Technologies <i>Chair: Naumov Andrey</i>
11:00-11:20	Pavone Francesco <i>(invited)</i> <i>University of Florence</i> Dual Assistance on Glioma Surgery: Tumor resection and histological support	11:00-11:20	Ahmadou Wagué <i>(invited)</i> <i>Cheikh Anta Diop University, Senegal</i>
11:20-11:40	Sroka Ronald <i>(invited)</i> <i>Laser-Forschungslabor, LIFE-Zentrum, Hospital of LMU Munich</i> Potential of Light in Neurosurgery – Fluorescence - PDT - DLT	11:20-11:40	Chang Shuai <i>(invited)</i> <i>Shenzhen MSU-BIT University</i> Dynamics Analysis of Quantum Dot Light-Emitting Devices Based on Time-Resolved Optoelectronic Technologies

11:40-12:00	Povolotskiy Alexey (<i>invited</i>) <i>Saint-Petersburg State University</i> Ultrafast dynamics in hybrid nanoparticles with a metal core	11:40-12:00	Subochev Pavel (<i>invited</i>) <i>Pavel Subochev</i> Multiscale Optoacoustic Tomography: from 3D Scanning Angiography to 5D Functional Real-Time Diagnostics
12:00-12:15	Kuchmizhak Aleksandr <i>Institute of Automation and Control Processes, Far Eastern Branch, Russian Academy of Science</i> Laser-generated metal-semiconductor nanohybrids for near-IR light-to-heat conversion	12:00-12:15	Orlova Anna <i>A.V. Gaponov-Grekhov Institute of Applied Physics of RAS</i> Optoacoustic Methods for Vascular Imaging in Biomedical Applications
12:15-12:35	Kandyla Maria (<i>invited</i>) <i>National Hellenic Research Foundation</i> Micro/nano-structured functional surfaces and devices by laser processing	12:15-12:30	Torokhov Timofei <i>Prokhorov General Physics Institute of the Russian Academy of Sciences</i> Optoacoustic and fluorescence lifetime bimodal visualization based on indocyanine green in phantoms
12:35-12:50	Soboleva Natalia <i>Institute of Engineering Science, Ural Branch of the Russian Academy of Sciences</i> The application of new nitrogen-containing flux-cored wires in laser directed energy deposition	12:30-12:45	Matveev Lev <i>Federal Research Center A.V. Gaponov-Grekhov Institute of Applied Physics of the Russian Academy of Sciences</i> Perceptual-Based Approach to Meso-scale Inhomogeneity Characterization in Optical Coherence Tomography (OCT) Scans

11:40-12:00	Barygina Victoria (<i>invited</i>) <i>University of Florence</i> Multispectral Skin Sensing for Psychological Stress Detection	11:40-11:55	Kozlova Katerina <i>Institute of Laser Physics of the Siberian Branch of the Russian Academy of Sciences</i> Atomic Magnetometry Using an Elliptically Polarized Light For Applications in Geology, Archeology and Medicine
12:00-12:15	Nizamutdinov Alexey <i>Kazan Federal University</i> Ultraviolet laser systems on Ce^{3+} -based active media and photodynamic processes	11:55-12:10	Pulatov Anvar <i>Namangan State University, Uzbekistan</i> High-power GaAs/AlGaAs-based semiconductor lasers and high-frequency pulsed lasers
12:15-12:35	Veres Miklos (<i>invited</i>) <i>HUN-REN Wigner Research Centre for Physics</i> Detection of DNA hybridization with alkyne-labelling and Raman spectroscopy	12:10-12:25	Tarasevich Aleksandr <i>P.N.Lebedev Physical Institute of the Russian Academy of Sciences</i> Photodegradation mechanism in all-inorganic metal halide perovskite nanocrystals
12:35-12:50	Kazantsev Ivan <i>XPANCEO</i> Additive-Free vdW Nanoparticle Inks via Femtosecond Laser Ablation for Aerosol Jet Printing	12:25-12:40	Semakova Eleonora <i>Ulugh Beg Astronomical Institute of the Uzbekistan Academy of Sciences</i> Firn-Line Altitude Changes as Indicators of Climate Variability and Atmospheric Moisture Conditions in the Mountain Regions of Uzbekistan Using Radar and Optical Remote Sensing Data

12:50-13:05	Battalova Elina <i>Department of Optics and Nanophotonics, Institute of Physics, Kazan Federal University</i> Non-thermal anti-Stokes photoluminescence in metal halide perovskites	12:45-13:00	Perekatova Valeriya <i>Federal Research Center A.V. Gaponov-Grekhov Institute of Applied Physics of the Russian Academy of Sciences (IAP RAS)</i> Complementary application of LSCI, OCT and DRS for comprehensive assessment of the microvascular bed: from numerical modeling to in vivo validation
13:05-14:30	Lunch		
14:30-16:20	Laser-Matter Interaction <i>Chairs: Sinev Dmitry, Dostovalov Alexander</i>	14:30-16:20	Biomedical Photonics Session 4. Laser & Photodynamic therapy <i>Chair: Genina Elina</i>
14:30-14:50	Dostovalov Alexander (invited) <i>Institute of Automation and Electrometry SB RAS, Russia</i> Spatial light modulator-assisted femtosecond laser processing: from bulk writing to surface patterning	14:30-14:50	Elagin Vadim (invited) <i>Privolzhsky Research Medical University</i> Optical-based approaches for PDT efficiency assessment
14:50-15:10	Starinskiy Sergey, Samokhvalov Faddey (invited) <i>S.S. Kutateladze Institute of Thermophysics SB RAS</i> Thermophysical mechanisms of laser printing and deposition: diagnostics, modeling, and optimization	14:50-15:10	Khaydukov Evgeny (invited) <i>Skolkovo Institute of Science and Technology, Petrovsky National Research Centre of Surgery</i> Upconversion in High-Tech BioMedicine

12:50-13:05	Molchanov Vladimir <i>University MISIS</i> Laser Hollow Beams Generated by Acousto- Optical Spatial Frequency Filters for Optical Trapping Applications	12:40-12:55	Pankov Anatoliy <i>Perm State University (PSU)</i> Collimated microlenses at the end of multimode optical fibers
14:30-16:20	Laser Systems and Materials <i>Chair: Babin Sergey</i>	14:30-16:15	Nanophotonics <i>Chair: Vlasov Igor</i>
14:30-14:50	Kostyukova Nadezhda <i>(invited)</i> <i>Institute of Laser Physics of the SB of the RAS</i> A high-energy, mid-infrared solid-state coherent source based on a $\text{BaGa}_2\text{GeS}_6$ optical parametric oscillator–amplifier system	14:30-14:50	Ermolaev Georgii <i>(invited)</i> <i>Xpanceo research on natural science L.I.C.S.O.C.</i> Giant optical anisotropy in van der Waals materials: from magnetic excitons to hyperbolic materials
14:50-15:10	Morozov Sergei <i>(invited)</i> <i>The Institute for Physics of Microstructures of the Russian Academy of Sciences</i> DFB-laser based on a quasirelativistic- momentum-law HgCdTe quantum well structure with a third-order Bragg grating	14:50-15:10	Kuntsevich Aleksandr <i>(invited)</i> <i>P.N. Lebedev Physical Institute of the Russian Academy of Sciences</i> Light emission from bulk MoS_2 nanostructures

15:10-15:30	Sinev Dmitry (<i>invited</i>) ITMO University Laser-induced periodic surface structures on thin films: mechanisms and applications	15:10-15:25	Ryabova Anastasia Prokhorov General Physics Institute of the Russian Academy of Sciences Registration of changes in the tumor extracellular matrix during photodynamic therapy
15:30-15:50	Ivanov Dmitry (<i>invited</i>) National Research Nuclear University MEPhI The Mechanism of Nanoparticles Formation due to Pulsed Laser Ablation of Thin Metallic and Semiconductor Films in Liquids: Numerical Study	15:25-15:40	Krivetskaya Anna Prokhorov General Physics Institute of the Russian Academy of Sciences Method for assessing optical properties of multilayer biological tissues for personalization of laser-induced therapy
15:50-16:05	Egorova Xenia Institute Laser Technology, University ITMO Direct laser thermochemical synthesis of functional SrTiO ₃ -based coatings	15:40-15:55	Zotov Arsen Prokhorov General Physics Institute of the Russian Academy of Sciences Optically tunable tissue-mimicking phantoms for laser thermotherapy
16:05-16:20	Shchekin Alexander LLC NPP LASSARD Residual stresses induced by laser formation of catalytically active surfaces on Al ₂ O ₃ ceramics	16:00-16:20	Utochnikova Valentina (<i>invited</i>) Lomonosov Moscow State University, Moscow, Center of Advanced Research, HSE, Russia Lanthanide-based MOFs for luminescent thermometry: design, synthesis, and application in laser surgery
16:20-16:40	Coffee break		
16:40-19:00	Poster Section		

15:10-15:30	Fedotov Andrei (<i>invited</i>) <i>Lomonosov Moscow State University</i> Precise characterization of dispersion and birefringence in a photonic crystal fiber using spontaneous vector four-wave mixing	15:10-15:30	Prokhorov Alexei (<i>invited</i>) <i>Center for Photonics and 2D Materials, Moscow Institute of Physics and Technology</i> Anisotropic and nonlinear optical metasurfaces based on van der Waals materials
15:30-15:45	Kokhanovskiy Alexey <i>ITMO University</i> Optofluidic laser filled with perovskite nanocrystals	15:30-15:45	Chernyak Anna <i>Lomonosov MSU</i> TMDC-Induced Ultrafast All-Optical Switching in Hybrid Metasurface
15:45-16:00	Didenko Yana <i>Prokhorov General Physics Institute of Russian Academy of Sciences</i> Growth, spectroscopy and laser operation of disordered $\text{Tm,Ho:NaGd}(\text{MoO}_4)_2$ crystal	15:45-16:00	Kuznetsov Alexey <i>Moscow Institute of Physics and Technology</i> Towards exciton-plasmon-polaritons observation in hybrid GaP nanowire/WS_2/Ag heterostructure
16:00-16:20	Yakubovsky Dmitry (<i>invited</i>) <i>Center for Photonics and 2D Materials, Moscow Institute of Physics and Technology</i> Graphene-Inspired 2D-Grown Ultrathin Metal Films: Transferable Platform for Flexible Optoelectronics and Sensing	16:00-16:15	Kuritskij Michael <i>Immanuel Kant Baltic Federal University, Kaliningrad, Russia</i> Multifunctional Titanium Metasurfaces with Plasmonic Generation for Sensing and Photocatalysis

Wednesday, 30 September 2026

9:00-9:45	Plenary session 6: <i>Barcikowski Stephan</i> <i>University Duisburg-Essen</i> Fundamentals, Throughput Breakthroughs, and Applications of Laser-generated Nanoparticles in Liquides
9:45-10:30	Plenary session 7: <i>Loza-Alvarez Pablo</i> <i>ICFO- The Institute of Photonic Sciences</i> Selected biomedical applications in fast volumetric imaging using light-sheet microscopy
10:30-11:00	Coffee break

	Room 1		Room 2
11:00-12:45	Laser-Matter Interaction <i>Chairs: Kucherik Alexey, Tselikov Gleb</i>	11:00-13:00	Nonlinear and Terahertz Photonics <i>Chair: Shkurinov Alexander</i>
11:00-11:20	<i>Kucherik Alexey (invited)</i> <i>Vladimir State University</i> Laser synthesis of carbyne-enriched thin films for sensor devices	11:00-11:20	<i>Vaks Vladimir (invited)</i> <i>Institute for Physics of Microstructures of Russian Academy of Sciences</i> Study of polyps of different life support systems organs by high-resolution THz spectroscopy
11:20-11:40	<i>Tselikov Gleb (invited)</i> <i>Emerging Technologies Research Center, XPANCEO</i> Tunable Nanostructuring for van der Waals Materials	11:20-11:40	<i>Kitaeva Galiya (invited)</i> <i>Lomonosov Moscow State University</i> Correlation of optical and terahertz photons generated in a non-collinear scheme of parametric down-conversion
11:40-12:00	<i>Klimentov Sergei (invited)</i> <i>National Research Nuclear University (MEPhI)</i> Short Pulse Ablative Laser Approaches to Engineering Nanomaterials for Biomedical Innovations	11:40-12:00	<i>Komlenok Maxim (invited)</i> <i>Prokhorov General Physics Institute of the Russian Academy of Sciences</i> Nitrogen-doped diamond as a new material for high-power photoconductive terahertz antenna

	Room 3		Room 4
11:00-13:05	Laser Systems and Materials <i>Chair: Kostyukova Nadezhda</i>	11:00-13:05	Nanophotonics <i>Chair: Vlasov Igor</i>
11:00-11:20	Okhrimchuk Andrey (invited) <i>Prokhorov General Physics Institute of the Russian Academy of Sciences</i> Micro- and nano-structuring of optical materials with a femtosecond laser beam: applications	11:00-11:20	Ermakova Anna (invited) <i>Hasselt University, Royal Belgian Institute for Space Aeronomy</i> Diamond as sensing platform
11:20-11:40	Babin Sergey (invited) <i>Institute of Automation and Electrometry SB RAS</i> Nonlinear spatio-spectral control of laser beams in multicore fibers	11:20-11:40	Zanelli Gabriele (invited) <i>Istituto Nazionale di Ricerca Metrologica (INRiM)</i> Clock transitions in Nitrogen-Vacancy color centers in diamond for Quantum Sensing
11:40-12:00	Stefan Wabnitz (invited) <i>Sapienza University of Rome Novosibirsk State University</i> Phase transitions in spatio-temporal mode locking of	11:40-12:00	Romshin Alexey (invited) <i>Prokhorov General Physics Institute of the Russian Academy of Sciences</i> Luminescent diamonds for all-optical nanoscale thermometry and thermal control in biological systems

12:00-12:15	Kostsov Daniil <i>Lebedev Physical Institute of the Russian Academy of Sciences</i> Synthesis of Porous Silicon-Based SERS Substrates with Noble Metal Particles obtained through Laser-Induced Transfer for the investigation of SERS of biological materials	12:00-12:15	Chiglintsev Emil <i>Moscow Institute of Physics and Technology</i> Probing Structural Symmetry Breaking in TMDC Alloy via Terahertz Emission
12:10-12:30	Ishkiniaev Emil <i>LLC LASSARD</i> A Modern Approach to Enhancing the Fatigue Strength of Metal Alloys by Laser Shock Peening	12:10-12:30	Brekhov Kirill <i>MIREA-Russian Technological University</i> Optically pumped THz modulation in 2D transition metal dichalcogenide/silicon heterostructures
12:30-12:45	Vasilev Mikhail <i>S.S. Kutateladze Institute of Thermophysics SB RAS</i> Nanosecond Laser-Textured Silicon Surfaces for Controlling Droplet Boiling Regimes on Superheated Substrates	12:30-12:45	Gavdush Arsenii <i>Prokhorov General Physics Institute of the Russian Academy of Sciences</i> Broadband spectroscopy of astrophysical ice analogues: recent results, possibilities and perspectives
		12:45-13:00	Kolesnikova Alena <i>Skolkovo Institute of Science and Technology</i> Hybridization of Kerr Solitons in Coupled Microresonators
13:05-14:30	Lunch		
15:00-18:00	Social Program		
19:00-22:00	Conference Dinner		

12:00-12:20	Rodin Pavel (<i>invited</i>) <i>Ioffe Institute</i> Direct Current Modulation of Power Semiconductor Lasers at High Frequency by Self-Oscillating Avalanche Diodes	12:00-12:15	Pasternak Dmitrii <i>Prokhorov General Physics Institute of the Russian Academy of Sciences (GPI RAS)</i> Near-Surface Activation of SiV Fluorescence in a New Generation of HPHT Nanodiamonds
12:20-12:35	Dautov Albert <i>Saint-Petersburg State University</i> III-N nanostructures on h-BN: From selective growth of AlN nanowires to InN quantum dots	12:15-12:35	Gritsienko Alexander (<i>invited</i>) <i>Moscow Institute of Physics and Technology</i> Two-photon direct laser writing of micro-optics: enabling quantum photonic devices and imprint-ready master structures
12:35-12:50	Starobor Aleksey <i>Federal Research Center A.V. Gaponov-Grekhov Institute of Applied Physics of the Russian Academy of Sciences (IAP RAS)</i> Broadband 2 μ m Faraday Isolator	12:35-12:50	Zhivopistsev Alexander <i>Prokhorov General Physics Institute of the Russian Academy of Sciences</i> Coupling of SiV-fluorescent nanodiamonds with microresonators
12:50-13:05	Zimina Yulia <i>Prokhorov General Physics Institute of the Russian Academy of Sciences, Mendeleev University of Chemical Technology</i> The influence of Tm and Li concentrations on the spectroscopic, luminescent, laser, and EPR properties of Tm,Li:ZnWO ₄ crystals	12:50-13:05	Vlasov Igor <i>Prokhorov General Physics Institute of the Russian Academy of Sciences</i> Natural diamonds emitting single photons

Thursday, 01 October 2026

9:00-9:45	Plenary session 8: <i>Deyev Sergey</i> <i>National Research Centre "Kurchatov Institute"</i> Innovative technologies for targeted irradiation of deep-seated tumors
9:45-10:30	Plenary session 9: <i>Zavestovskaya Irina</i> <i>National Research Center "Kurchatov Institute", Lebedev Physics Institute of RAS</i> Advanced Technologies of Nuclear Medicine and Radiology
10:30-11:00	Coffee break

	Room 1		Room 2
11:00-13:05	Laser Diagnostics and Spectroscopy <i>Chairs: Dolenko Tatiana, Zhigunov Denis</i>	11:00-13:05	Biomedical Photonics Session 5. Laser measurements and Nanoparticles <i>Chair: Zaitsev Vladimir</i>
11:00-11:20	<i>Rodina Anna (invited)</i> <i>Ioffe Institute</i> One and two photon PLE spectroscopy as a key to the interface properties of InP/ZnSe nanocrystals	11:00-11:20	<i>Solovyeva Elena (invited)</i> <i>Saint-Petersburg State University</i> Gold Nanoparticles for Biomedical Application: Insight into Their Photodynamic and Catalytic Properties
11:20-11:40	<i>Milekhin Alexander (invited)</i> <i>A. V. Rzhzanov Institute of Semiconductor Physics, Siberian Branch of the Russian Academy of Sciences</i> Tip-enhanced optical spectroscopy of one-dimensional nanostructures	11:20-11:35	<i>Priezzhev Alexander</i> <i>Physics Department, M.V. Lomonosov Moscow State University</i> Laser assisted methods for studying the interactions between cellular components of blood and vessel endothelium
11:40-12:00	<i>Dyakov Sergey (invited)</i> <i>Skolkovo Institute of Science and Technology</i> Strong coupling of chiral light with chiral matter: a macroscopic study	11:35-11:50	<i>Karmenyan Artashes</i> <i>Department of Physics National Dong Hwa University, Hualien, Taiwan</i> Observation and analysis of Luminescence of a colloidal-organized suspension of nanodiamonds

	Room 3		Room 4
11:00-13:00	Nonlinear and Terahertz Photonics <i>Chair: Shkurinov Alexander</i>	11:00-12:45	Nanophotonics <i>Chair: Kuchmizhak Aleksandr</i>
11:00-11:20	Peng Yan (<i>invited</i>) <i>University of Shanghai for Science and Technology</i> Graphene-Enabled Ultra-wideband Terahertz Fingerprint Enhancement Sensing	11:00-11:20	Fedyanin Andrey (<i>invited</i>) <i>Faculty of Physics, Lomonosov Moscow State University</i> Dielectric metasurfaces for analog optical image processing and neuromorphic photonic applications
11:20-11:40	Kosareva Olga (<i>invited</i>) <i>Physics Faculty, Lomonosov Moscow State University</i> Even harmonic generation from the air-based femtosecond plasma for remote sensing applications	11:20-11:40	Makarov Sergey (<i>invited</i>) <i>ITMO University</i> Halide perovskite components for integrated photonics
11:40-11:55	Tikhodeev Sergei <i>Lomonosov Moscow State University, Faculty of Physics</i> Control of the polarization of coherent radiation from a chiral semiconductor microcavity using resonant optical pumping	11:40-12:00	Toropov Nikita (<i>invited</i>) <i>University of Southampton</i> Whispering-Gallery Mode Microresonators: Biosensing and Cavity-Enhanced Phenomena

12:00-12:20	Vasiliev Roman (invited) <i>Lomonosov Moscow State University</i> Chiral exciton engineering in hybrid structures based on atomically thin 2D AlIBVI semiconductors for photonics	11:50-12:05	Juarez Patricia <i>CICESE</i> Design and characterization of luminescent nanoparticles for their application in bone regeneration and angiogenesis
12:20-12:35	Kytina Ekaterina <i>Faculty of Physics, M.V. Lomonosov Moscow State University, Moscow, Russia</i> Features of photoluminescence of porous anodic aluminum oxide	12:05-12:20	Tankanag Arina <i>Institute of Cell Biophysics RAS, Russian Federation</i> Influence of NO synthesis modulation on peripheral skin blood flow regulation under local heating in db/db type 2 diabetic mice
12:35-12:50	Vervald Alexey <i>Lomonosov Moscow State University</i> Life path of a molecular luminophore in hydrothermal synthesis of carbon dots	12:20-12:35	Zaytsev Valeriy <i>Institute of Automation and Control Processes, FEB RAS, Vladivostok, Russia</i> Real-time Imaging Photoplethysmography for Intraoperative Perfusion Mapping: Synchronized iPPG-ECG System
12:50-13:05	Dolenko Sergey <i>D.V.Skobeltzyn Institute of Nuclear Physics, M.V.Lomonosov Moscow State University (SINP MSU)</i> Transfer Learning for Effective Increase of the Number of Simultaneously Determined Parameters in Solving Multi-Parameter Inverse Problems of Spectroscopy	12:35-12:50	Platonova Alina <i>Prokhorov General Physics Institute Russian Academy of Science</i> Sapphire Probes Based on Diffuse Reflectance Spectroscopy for Biomedical Applications
		12:50-13:05	Zalygin Anton <i>LPI Troitsk science park P.N. Lebedev Physical Institute of the Russian Academy of Sciences</i> Coarse-Grained Molecular Dynamics Simulation of Lipid Nanoparticle Self-Assembly for siRNA Delivery

11:55-12:10	Dubinov Alexander <i>Institute for Physics of Microstructures RAS</i> Towards THz HgCdTe-based quantum cascade laser	12:00-12:15	Sgibnev Evgenii <i>Dukhov Automatics Research Institute (VNIIA)</i> Mechanically-induced crystallization of CsPbBr₃ nanocrystals on the surface of borogermanate glass for gas sensing applications
12:10-12:25	Tillayev Yusuf <i>Ulugh Beg Astronomical Institute</i> Long-Term Variability of Precipitable Water Vapor Above Maidanak Observatory	12:15-12:30	Reznik Rodion <i>Saint-Petersburg State University</i> III-V hybrid nanostructures integrated with the silicon platform
12:25-12:40	Alyabyeva Liudmila <i>Moscow Institute of Physics and Technology</i> Oxidation state engineering in cobalt ferrite for terahertz telecommunications	12:30-12:45	Fradkin Ilia <i>Skolkovo Institute of Science and Technology</i> Resonant subspace approximation for optical modes in photonic crystal slabs: fast parametric mapping and applications
12:40-13:00	Stremoukhov Sergey <i>(invited)</i> <i>Lomonosov Moscow State University</i> High-order harmonics and terahertz radiation ellipticity: influence of atomics state symmetry		

13:05-14:30	Lunch		
14:30-16:00	Laser Diagnostics and Spectroscopy <i>Chairs: Milekhin Alexander, Novikov Alexey</i>	14:30-16:00	Biomedical Photonics Session 6. Laser tissue interaction <i>Chair: Cheng Chia-Liang</i>
14:30-14:50	Dolenko Tatiana (<i>invited</i>) <i>Department of Physics, Lomonosov Moscow State University</i> Raman and Fluorescence Spectroscopy of Interactions of Carbon Nanoparticles with Ions in Multicomponent Solutions	14:30-14:50	Belikov Andrei (<i>invited</i>) <i>ITMO University</i> Optical controlling multi-wavelength laser action on blood-containing tissue
14:50-15:10	Pershin Sergey (<i>invited</i>) <i>Prokhorov General Physics Institute of the Russian Academy of Sciences</i> CARS of rotational GHz resonances of ortho- and para-H ₂ O in water: ortho/para ratio 1:1	14:50-15:10	Gusliakova Olga (<i>invited</i>) <i>Center for Bio- and Medical Technologies, Skoltech</i> Light-activated sting agonist release for macrophage reprogramming
15:10-15:30	Korsakov Andrey (<i>invited</i>) <i>IGM SB RAS</i> Applications of Raman Spectroscopy in Earth Sciences: A Case Study of Deep-Seated Xenoliths from the "Eclogite" Pipe (Eastern Pamir)	15:10-15:30	Sviridov Alexander (<i>invited</i>) <i>TKC "Kurchatov institute"</i> Controlled Laser Treatment of Biological Tissues
15:30-15:45	Kudryavtseva Anna <i>P.N. Lebedev Physical Institute of the Russian Academy of Sciences</i> Stimulated Brillouin Scattering Spectral and Temporal Characteristics Dependence on Water Salinity	15:30-15:45	Zhao Xiangwei <i>Southeast University</i> Thermal Effect of Surface Plasmon and Its Biomedical Applications

14:30-16:00	Nonlinear and Terahertz Photonics <i>Chair: S.Stremukhov</i>	14:30-16:00	Laser-Matter Interaction <i>Chair: Klimentov Sergei</i>
14:30-14:50	Glyavin Mikhail (<i>invited</i>) <i>Institute of Applied Physics RAS</i> Powerful sub-THz gyrotrons with instantaneous switch-on	14:30-14:50	Tarasenko Nikolai (<i>invited</i>) <i>B.I. Stepanov Institute of Physics, National Academy of Sciences of Belarus</i> Laser processing in liquid for alloying, fragmentation and surface nanomaterial modification
14:50-15:10	Kovalev Valeri (<i>invited</i>) <i>Lebedev Physical Institute of RAS</i> Nonlinear Absorption of Ultrashort Laser Pulses in a Barium Tungstate Crystal	14:50-15:05	Grigoriev Sergey <i>Dukhov Research Institute of Automotics</i> Damage model for silicon irradiated by high-intensity X-ray laser pulse
15:10-15:25	Migal Ekaterina <i>M.V. Lomonosov Moscow State University</i> Sustaining Hot Electrons in Graphene via Terahertz Pulse Waveform Shaping	15:05-15:20	Gordeeva Anastasiia <i>Perm State University</i> Dual-fiber optical tweezers
15:25-15:40	Kucheryavenko Anna <i>Prokhorov General Physics Institute of the Russian Academy of Sciences</i> Terahertz-wave scattering in tissues: the applicability limits of effective medium theory	15:20-15:40	Bonschetto David (<i>invited</i>) <i>ENSTA Paris, Ecole Polytechnique, CNRS, Polytechnic Institute of Paris</i> Charge Transfer Dynamics in Confined Systems as an Ultrafast Route to Functional Control

15:45-16:00	Abramov Pavel <i>Moscow Institute of Physics and Technology</i> Infrared Tracking of Copper-Bound Water and Thermal Transformations in Eumelanin	15:45-16:00	Aleksandrova Polina <i>Prokhorov general physics institute of the Russian academy of sciences</i> Laser ablation and coagulation of soft biological tissues under exposure of microsecond pulsed laser
16:00-16:20	Coffee break		
16:20-18:30	Laser Diagnostics and Spectroscopy <i>Chair: Pavlov Victor</i>	16:20-17:45	Biomedical Photonics Session 7. Fluorescence/ FLIM <i>Chair: Shcheslavskiy Vladislav</i>
16:20-16:40	Tcherniega Nikolay (invited) <i>P.N. Lebedev Physical Institute</i> Random laser generation - fundamental and applied aspects	16:20-16:40	Kuznetsova Daria (invited) <i>Institute for Regenerative Medicine, Sechenov First Moscow State Medical University (Sechenov University)</i> FLIM-Based Metabolic Profiling for Non-Invasive Assessment of Spheroids in Regenerative Medicine
16:40-17:00	Vartanyan Tigran (invited) <i>ITMO University</i> Plasmonic enhancement of optical processes: expectations and reality	16:40-17:00	Savelieva Tatiana (invited) <i>Prokhorov General Physics Institute of Russian Academy of Sciences</i> Method of detecting tissues of intracranial tumors using fiber optic laser spectroscopy in situ
17:00-17:20	Novikov Alexey (invited) <i>Institute for Physics of Microstructures RAS</i> Probing of resonant states in dielectric resonators by light-emitting structures with Ge(Si) self-assembled nanoislands	17:00-17:15	Gorbunova Ioanna <i>Institute for regenerative medicine, Sechenov First Moscow State Medical University, Moscow, Russia</i> Compartment-Resolved Monitoring of Cellular Metabolism by NAD(P)H FLIM

15:40-16:00	Savel'ev Andrei (<i>invited</i>) <i>Faculty of Physics Lomonosov Moscow State University</i> Nonlinear conversion to lower frequencies under femtosecond filamentation in air	15:40-16:00	Alexey Bolshakov (<i>invited</i>) <i>Moscow Institute of Physics and Technology</i> Nanostructures for control over luminescence in 2D materials
16:20-18:30	Round table discussion "Scientific aspects of development a terahertz component base" <i>Chairs: Shkurinov Alexander S. Stremukhov</i>	16:20-18:25	Nanophotonics <i>Chair: Vlasov Igor</i>
16:20-16:40	Vdovin Vyacheslav (<i>invited</i>) <i>Federal Research Center A.V. Gaponov-Grekhov Institute of Applied Physics of the Russian Academy of Sciences (IAP RAS)</i> Long-term research cycles of the microwave astroclimate at Suffa and other promising sites for subterahertz astronomy	16:20-16:40	Smirnov Alexander (<i>invited</i>) <i>Kotelnikov Institute of Radioengineering and Electronics of RAS</i> Optical nonlinearities in copper-doped cadmium selenide nanotetrapods
16:40-17:00	Gruzdev Vitaly (<i>invited</i>) <i>ITMO University</i> Electron dynamics in metal nanostructures and petahertz effects	16:40-16:55	Saidvaliev Ulugbek <i>Tel Aviv University</i> Studying fluorescent properties of olive carbon dots using time- resolved fluorescence measurements
17:00-17:15	Migal Ekaterina <i>M.V. Lomonosov Moscow State University</i> A prospective hybrid platform based on barium chalcogenides and graphene for nonlinear integral THz photonics	16:55-17:10	Dmitrieva Olga <i>Lomonosov Moscow State University</i> Nonlinear response of a semiconductor microcavity with excitonic layers

17:20-17:40	Stepikhova Margarita <i>(invited)</i> <i>Institute for Physics of Microstructures Russian Academy of Sciences</i> Topological nanocavities: possibilities to control the light-emission properties of SiGe structures	17:15-17:30	Mozherov Artem <i>Institute for Regenerative Medicine, Sechenov First Moscow State Medical University (Sechenov University)</i> FLIM-based metabolic monitoring of burn wound regeneration for early identification of burn wound conversion
17:40-18:00	Zhigunov Denis <i>(invited)</i> <i>Skolkovo Institute of Science and Technology</i> 1.5 μm laser linewidth diagnostics and narrowing by silicon photonic integrated circuits	17:30-17:45	Pominova Daria <i>Prokhorov General Physics Institute of the Russian Academy of Sciences</i> FLIM-based diagnosis of tumor metabolic state using endogenous NADH and FAD lifetime of tumor and immune cells
18:00-18:15	Saidvaliev Ulugbek <i>Tel Aviv University</i> Mapping Nanoscale Heterogeneity in Copolymer Composites Using FLIM		
18:15-18:30	Nesterenko Dmitry <i>Samara National Research University</i> Estimation of average values over intensity distribution wavelength spectra of light field using bandpass filters		

17:20-18:30	Members of the "Microelectronics 2026" Forum	17:10-17:25	Maksimov Fedor <i>MIPT, RQC</i> Photoluminescence Enhancement of Single- Walled Carbon Nanotubes on a Metasurface
		17:25-17:40	Gridchin Vladislav <i>St. Petersburg State University</i> MBE Growth of GaN Nanowires on GaN/AlN/ Si Templates: Toward UV Nanolasers
		17:40-17:55	Kolobova Ekaterina <i>St. Petersburg State University</i> Luminescent Vancomycin- Stabilized Copper Nanoclusters as Optical Sensors and Chiral Selectors
		17:55-18:10	Zamoryanskaya Maria <i>Ioffe Institute</i> Autonomous sources of optical radiation based on wide-bandgap materials
		18:10-18:25	Beltukov Yaroslav <i>Ioffe Institute</i> Nanoscale dielectric properties of disordered media

Friday, 02 October 2026

9:00-9:45	Plenary session 10: Zhu Yiming <i>University of Shanghai for Science and Technology</i> Terahertz SNOM Technology and Its Applications
9:45-10:30	Plenary session 11: Ralchenko Victor <i>Prokhorov General Physics Institute of Russian Academy of Sciences</i> CVD diamond for lasers and photonics: growth, properties, treatment, examples of applications
10:30-11:00	Coffee break

	Room 1
11:00-13:40	Laser Diagnostics and Spectroscopy <i>Chairs: N.Tchernega, Dyakov Sergey, Vasiliev Roman</i>
11:00-11:20	Mutlin Sergey (invited) <i>Rzhanov Institute of Semiconductor Physics Siberian Branch of Russian Academy of Sciences</i> Spatial light modulator development for laser wavefront shaping
11:20-11:40	Milichko Valentin (invited) <i>Dalian University of Technology (China), New Uzbekistan University (Uzbekistan)</i> Nonlinear metal-organic framework crystals for light conversion and generation



	Room 3		Room 4
11:00-13:10	Nonlinear and Terahertz Photonics <i>Chair: Shkurinov Alexander</i>	11:00-13:10	Nanophotonics <i>Chair: Kuchmizhak Aleksandr</i>
11:00-11:20	Shkurinov Alexander <i>(invited)</i> <i>Lomonosov Moscow State University</i> Limits of terahertz nanoscale electrodynamics	11:00-11:20	Bogdanov Andrey <i>(invited)</i> <i>Qingdao Innovation and Development Center, Harbin Engineering University</i> Non-Hermitian Singularities in Mie Resonators and Metasurfaces
11:20-11:40	Tarasov Mikhail <i>(invited)</i> <i>V. Kotelnikov Institute of Radio Engineering and Electronics</i> Incoherent superconducting receivers for ground-based radio astronomy	11:20-11:40	Petrov Mihail <i>(invited)</i> <i>ITMO University</i> Ultrafast optical nonlinearities and harmonic generation in resonant metasurfaces and metastructures

11:40-12:00	<i>Dolgova Tatyana (invited)</i> <i>Faculty of Physics, Lomonosov Moscow State University</i> Cavity-assisted THz waveform control via optically reconfigurable carrier layers in GaAs
12:00-12:20	<i>Bessonov Vladimir (invited)</i> <i>Faculty of Physics, Lomonosov Moscow State University</i> Light control with optical surface states in one-dimensional photonic crystals
12:20-12:40	<i>Pavlov Victor (invited)</i> <i>Ioffe Institute</i> Optical second harmonic generation spectroscopy of antiferromagnets
12:40-12:55	<i>Moskovskiy Maxim</i> <i>Federal Scientific Agroengineering Center VIM</i> Technology of phytosanitary control of plant diseases based on SERS spectroscopy
12:55-13:10	<i>Nikonorov Nikolay</i> <i>ITMO University</i> Advanced Bragg gratings based on photo-thermo-refractive glasses for laser technologies

11:40-11:55	Titova Elena <i>'Center for Neurophysics and Neuromorphic Technologies' Limited Liability Company</i> Ultra-fast response times in sub-THz graphene photodetectors	11:40-11:55	Smagin Ilia <i>Skolkovo institute of science and technology</i> Interpreting the Lipkin tensor: anisotropic structure of electromagnetic chirality
11:55-12:10	Shishkovsky Igor <i>P.N. Lebedev Physical Institute of the RAS, Samara branch</i> Terahertz and Ultrasound Multimodal Diagnostics of Bioresorbable Ceramics TPMS Scaffolds	11:55-12:10	Salakhova Natalia <i>Skolkovo Institute of Science and Technology</i> Casimir Effect and Casimir Torque in Chiral Photonic Gratings
12:10-12:25	Stepanov Andrey <i>Institute of Applied Physics, Russian Academy of Sciences</i> Terahertz-induced electron emission from single-layer graphene	12:10-12:25	Musorin Alexander <i>Lomonosov Moscow State University</i> Asymmetric Optical Harmonic Generation in Silicon Metasurfaces
12:25-12:40	Ushakov Aleksandr <i>Prokhorov General Physics Institute of the Russian Academy of Sciences</i> Microwave radiation generation from DC-biased femtosecond laser air filament	12:25-12:40	Maslova Valeria <i>Moscow Center for Advanced Studies, Moscow, Russia</i> Virtual absorption beyond the linear regime: Influence of nonlinearity on energy accumulation
12:40-12:55	Zhivetev Kirill <i>Moscow Institute of Physics and Technology</i> Terahertz spectroscopy of ferroelectrics with perovskite structure	12:40-12:55	Urinov Bogibek <i>Urgench State University named after Abu Rayhan Biruni</i> Numerical Analysis of Second-Harmonic Generation Efficiency and Pulse Dynamics in Periodically Poled GaN under Femtosecond Excitation.

13:10-13:25	Sdvizhenskii Pavel <i>Prokhorov General Physics Institute of the Russian Academy of Sciences</i> Combined nano- and microsecond laser ablation for elemental profiling of coated steel samples by laser induced breakdown spectroscopy
13:25-13:40	Lednev Vasily <i>Prokhorov General Physics Institute of the Russian Academy of Sciences, Moscow, Russia</i> In situ analysis of bulk technological fluid by double-pulse laser induced breakdown spectroscopy
14:00-14:15	Presentation of ALT`27
14:15-14:30	Closing ceremony

12:55-13:10	Zhukova Elena <i>Moscow Institute of physics and technology</i> Terahertz characterization of Advanced Superconducting and Ferroelectric Heterostructures: Bridging Fundamental Electrodynamics to Next Generation Device Performance	12:55-13:10	Novikov Vladimir <i>Department of Physics, M.V. Lomonosov Moscow State University</i> Enhanced Goos-Hänchen Effect in ENZ Metamaterials

Posters

Tuesday, 29 September 2026 / 16:40-19:00

Laser-Matter Interaction

1	Akhmedov Munisbek Urgench state university Influence of Electron Density on Self-Regulated Crater Evolution in Molybdenum Plasma Induced by Picosecond Nd:YAG Laser Irradiation
2	Apresyan Leon Prokhorov General Physics Institute of the Russian Academy of Sciences Interference Power Flows and Energy Exchange between Sources in Absorbing Media
3	Ashikkalieva Kuralai Prokhorov General Physics Institute of the Russian Academy of Sciences Laser-induced graphitized wires in diamond for photoconductive antennas
4	Barmina Ekaterina Prokhorov General Physics Institute, Russian Academy of Sciences Laser synthesis of boron nanoparticles for BNCT
5	Demesh Maksim Department of Physics, Norwegian University of Science and Technology Power scaling through the geometry of channel Cr:ZnS waveguide lasers
6	Glushkov Kirill Federal Research Center A.V. Gaponov-Grekhov Institute of Applied Physics of the Russian Academy of Sciences (IAP RAS) Enhancement of VUV radiation power in a continuous jet of noble gases with coherent control of multiphoton transitions
7	Gorshenina Milana Prokhorov General Physics Institute of the Russian Academy of Sciences Theoretical analysis of the time to reach the explosive boiling threshold during laser ablation
8	Kandaurova Marina Institute of High Current Electronics SB RAS Microstructure and functional properties of surface layers of Ti-6Al-4V alloy after UV laser treatment

9	Kandaurova Marina <i>Institute of High Current Electronics SB RAS</i> Formation and morphology of microcracks in the laser-induced oxide layer on TiNi alloy surface
10	Minibaev Aidar <i>Institute of Physics, Kazan Federal University (KFU)</i> Electronic light scattering in crystalline and nanostructured semiconductors
11	Oksengendler Boris <i>Institute of Materials Science of the Academy of Sciences of the Republic of Uzbekistan,</i> Mechanisms of synergism in the combined effect of intense electromagnetic radiation and other factors on complex objects of living and non-living Nature.
12	Pikirenia Ivan <i>Republic of Belarus</i> Transadventitial Er:YAG laser treatment (RecoSMA) for mechanical arterial trauma
13	Sadullayev Jurabek <i>Urgench state university</i> Finite Element Modeling of Scanning-Speed Effects on the Temperature Field in Femtosecond Laser-Induced Graphene on Polyimide
14	Samokhvalov Faddey <i>S.S. Kutateladze Institute of Thermophysics SB RAS</i> Hydrodynamics and Heat Transfer during Femtosecond Laser-Induced Synthesis of Silver Microstructures from Aqueous Salt Solution
15	Shepelev Andrey <i>I.M. Gubkin Russian State University of Oil and Gas</i> Evaluation of the spatiotemporal temperature distribution under single-pulse, pulsed-periodic, and continuous-wave laser irradiation
16	Shevelkina Ekaterina <i>Prokhorov General Physics Institute of the Russian Academy of Sciences</i> Design and fabrication of tunable terahertz single-layer anti-reflection coatings on HRFZ-Si by direct nanosecond laser drilling
17	Shikhova Vera <i>Ural Federal University</i> Femtosecond NIR Laser Irradiation for Domain Switching in Single-domain and Polydomain SBN Single Crystals

18	Vapayev Murodbek <i>Applications of Ag Nanoparticles Deposited on Different Substrates by Femtosecond Pulsed Laser Deposition</i> Applications of Ag Nanoparticles Deposited on Different Substrates by Femtosecond Pulsed Laser Deposition
19	Zatsepin Evgeniy <i>South Ural State University, Chelyabinsk, Russia</i> Measurement of the dispersion of nonlinear crystals in the mid-infrared range by spontaneous parametric down-conversion

Biomedical Photonics

1	Belozеров Yuriy <i>A.V. Gaponov-Grekhov Institute of Applied Physics of the Russian Academy of Sciences</i> Comparison of LSCI-based flow velocity estimation methods in phantoms
2	Chekmareva Daria <i>Institute of Applied Physics, Russian Academy of Sciences</i> Multispectral optoacoustic localization of ICG-labeled sentinel lymph nodes: phantom study
3	Elagin Vadim <i>Privolzhsky Research Medical University</i> Antibacterial photodynamic therapy in treatment of chronic urinary tract infection
4	Glyavina Anna <i>Federal research center A.V. Gaponov-Grekhov Institute of Applied Physics of the Russian Academy of Sciences (IAP RAS)</i> Investigation of the structure of the vascular bed and the level of oxygenation of tumors in the combined treatment with antiangiogenic and radiation therapy
5	Gubankova Darya <i>Federal research center A.V. Gaponov-Grekhov Institute of Applied Physics of the Russian Academy of Sciences</i> Modeling and Phantom Validation of Transcranial Ultrasound Detectors for Photoacoustic Microscopy
6	Kurtaliev Eldar <i>Samarkand State University after Sh.Rashidov</i> Interaction of homodimer styrylcyanine dyes with human serum albumin

7	Maksimov Matvei <i>Lomonosov Moscow State University</i> RBC deformability assessment via optical tweezers enhanced with deep learning
8	Markova Inessa <i>Prokhorov General Physics Institute of the Russian Academy of Sciences</i> Special features of using fluorescence lifetime imaging microscopy for highly stiff tumors
9	Savelyev Andrey <i>A. V. Gaponov-Grekhov Institute of Applied Physics of the Russian Academy of Sciences</i> Multi-wavelength Monte Carlo LSCI Modeling for Blood Vessel Depth Reconstruction
10	Ustiantseva Daria <i>Prokhorov General Physics Institute of the Russian Academy of Sciences</i> Immersion optical clearing of biological tissues in the THz range
11	Khajiyev Lazizbek <i>State Institution "Radiopreparat", Institute of Nuclear Physics, Academy of Sciences of the Republic of Uzbekistan</i> Determination of radiochemical purity of radiopharmaceuticals ^{177}Lu -PSMA-617 and ^{177}Lu -DOTA-TATE
12	Chernykh Alexey <i>National Research Center "Kurchatov Institute"</i> Proton Beam therapy technology
13	Granin Dmitry <i>National Research Center "Kurchatov Institute"</i> Onco-Ophthalmology Systems "OKO" (from Cyclotron to Treatment Planning Systems)
14	Makoveeva Kseniia <i>National Research Center "Kurchatov Institute"</i> Promising targeted radiopharmaceuticals based on alpha-emitter lead-212
15	Petrunya Dmitry <i>National Research Center "Kurchatov Institute"</i> Boron Neutron Capture Therapy at the National Research Centre "Kurchatov Institute": Historical Overview and Future Prospects

Laser Systems and Materials

1	Badalova Zibakhanum <i>Institute of Physics of the Ministry of Science and Education</i> Optical and nonlinear optical properties of TiFeS_2 and TiFeSe_2 magnetic semiconductors: theory and experiment
2	Boyboboeva Sohiba <i>Institute of Nuclear Physics, Academy of Sciences of Uzbekistan</i> Ultraviolet Luminescence of Crystals and Nanoceramics of $\text{CaF}_2\text{-SrF}_2\text{:YbF}_3$ Solid Solutions
3	Burkov Alexander <i>Moscow Institute of Physics and Technology</i> Hybrid MOPA Source of Femtosecond Pulses with Spectrum Optimization of a Chirped Fiber Bragg Grating Stretcher
4	Ivleva Liudmila <i>Prokhorov General Physics Institute of the Russian Academy of Sciences</i> Spectroscopy of chromium ions in high temperature diffusion doped ferroelectric thin films
5	Kim Karina <i>Mendeleev University of Chemical Technology of Russia</i> Investigation of non-stoichiometry of ZnS for mid-IR lasers
6	Kokh Aleksandr <i>Sobolev Institute of Geology and Mineralogy SB RAS</i> Paratellurite crystals growth and their application in photonics
7	Kozlova Nina <i>National University of Science and Technology MISIS</i> Features of measuring the optical properties of dielectric ionic crystals taking into account gyrotropy
8	Kuzin Dmitry <i>Federal Research Center A.V. Gaponov-Grekhov Institute of Applied Physics of the Russian Academy of Sciences</i> Suppression of thermal effects in composite optical elements by using a thin layer of adhesive

9	Lis Denis <i>Prokhorov General Physics Institute, Russian Academy of Sciences</i> EPR observation of reversible rechange of paramagnetic iron centers in ZnWO_4 crystals under the influence of visible radiation
10	Lis Olga <i>Prokhorov General Physics Institute, Russian Academy of Sciences</i> Growth of mixed magnesium-zinc tungstate $\text{Zn}_x\text{Mg}_{1-x}\text{WO}_4$ single crystals of high optical quality with optimal Zn concentration for the Czochralski growth
11	Mamedova Irada <i>Institute of Physics of the Ministry of Science and Education</i> Optical and nonlinear optical properties of TlInS_2 crystals of the hexagonal modification: theory and experiment
12	Mashkovsky Dmitry <i>DMK Laser Microsystems Ltd.</i> Pulsed Nd:YAG DPSSL with intracavity SHG emitting 100 W at 10 kHz
13	Neznanov Daniil <i>Prokhorov General Physics Institute of the Russian Academy of Sciences</i> Development of All-Dielectric Magneto-Optical Transducer
14	Pytchenko Aleksandr <i>Mendeleev University of Chemical Technology of Russia</i> Effect of oxygen impurity on the properties of zinc telluride
15	Pytchenko Aleksandr <i>Mendeleev University of Chemical Technology of Russia</i> Measuring water concentration in LBO
16	Reznikov Konstantin <i>AVESTA Ltd.</i> Photoinduced Residual Losses in Directly Diode-Pumped Ti:Sapphire Lasers
17	Senchurova Anastasiia <i>Prokhorov General Physics Institute of the Russian Academy of Sciences</i> Design of 4 μm mid-Infrared laser based on Ho^{3+} ions with commercial diode pumping

18	Serkina Ksenia <i>D. Mendeleev University of Chemical Technology of Russia</i> Tunable upconversion luminescence of Er³⁺, Tm³⁺-doped bismuth-germanate glasses for NIR-visualization applications
19	Simonova Varvara <i>Dukhov Automatics Research Institute</i> Laser-optical systems for ultrafast processes registration
20	Sokolov Anton <i>Mendeleev University of Chemical Technology of Russia</i> Synthesis of high purity calcium fluoride for optical element for photolithography
21	Sychkova Darina <i>Novosibirsk State University, A. V. Nikolaev Institute of Inorganic Chemistry, Siberian Branch of the Russian Academy of Sciences</i> Determination of the orientation of nonlinear optical crystals of the Li-Na-Mo-O system on a modern single crystal diffractometer
22	Terekhova Anastasia <i>Mendeleev University of Chemical Technology of Russia</i> Luminescence properties of erbium-doped novel lead germanate oxybromide glasses
23	Tumarkin Andrei <i>Saint Petersburg Electrotechnical University "LETI"</i> Chromium-doped SrBaNb₂O₆ thin films: fabrication and structural properties
24	Umylin Vladislav <i>National University of Science and Technology MISIS</i> Physical origin of the short-circuit currents in the langasite family crystals
25	Voronina Elena <i>Department of Chemistry and Technology of Crystals, D. Mendeleev University of Chemical Technology of Russia (MUCTR)</i> Purity analysis of facilities for VGF method growth GaAs

26	Zabelina Evgenia <i>National University of Science and Technology MISIS</i> Specificity of the origin of color-related defect centers in langasite ($\text{La}_3\text{Ga}_5\text{SiO}_{14}$), langatate ($\text{La}_3\text{Ga}_{5,5}\text{Ta}_{0,5}\text{O}_{14}$) and catangasite ($\text{Ca}_3\text{TaGa}_3\text{Si}_2\text{O}_{14}$) crystals
27	Zaloznaya Elizaveta <i>Dukhov Automatics Research Institute</i> Low-coherence illumination system for shadow characterization of fast processes
28	Fedoruk Mikhail <i>Novosibirsk State University</i> Numerical Modeling of Kerr-Enhanced Raman Beam Cleaning in a Short Multimode GRIN Fiber
29	Fedoruk Mikhail <i>Novosibirsk State University</i> Fast Sixth-Order Padé Schemes Based on the Joukowski Transform and Chebyshev Polynomials for the Direct Zakharov–Shabat Problem

Laser Diagnostics and Spectroscopy

1	Chugreeva Galina <i>Faculty of Physics, M. V. Lomonosov Moscow State University, Russia</i> Creation of a carbon nanosensor with controlled luminescent properties
2	Dementeva Ekaterina <i>Ioffe Institute</i> Traps in diamonds and wide-band luminescent materials
3	Gusev Grigori <i>Ioffe Institute</i> Study on the cathodoluminescent properties of NV-containing diamonds as a function of the growth sector

4	Ismailov Fakhridin <i>Samarkand State University named after Sharof Rashidov</i> Analysis of the Concentration Behavior of the Landau–Placzek Ratio at the Peculiar Point of Aqueous Solutions
5	Jumabaev Abduvakhid <i>Samarkand State University after Sharaf Rashidov</i> Nature of halogen bonding in phx-dmf (x=cl, br, i) complexes: experimental and theoretical (dft) consistency
6	Jumabaev Abduvakhid <i>Samarkand State University after Sharaf Rashidov</i> Study of $\text{ch} \cdots \pi$ intermolecular interactions in the meta-xylene and chloroform system based on raman spectroscopy and mep maps
7	Kostsov Daniil <i>Lebedev Physical Institute of the Russian Academy of Sciences</i> Morphology and Optical Properties of SERS-Active Substrates with Silver Nanoparticles Deposited on Single-Crystal and Porous Silicon Surfaces
8	Kozlov Dmitry <i>Prokhorov General Physics Institute</i> Near- and middle-IR range laser generation of refractive index gratings in gases to detect weak absorption by molecular species or small amounts of absorbers
9	Omonov Khumoyun <i>Institute of Engineering Physics, Sharof Rashidov Samarkand State University, Samarkand, Uzbekistan</i> Concentration-dependent structural changes in water–isopropanol systems studied by dynamic light scattering
10	Orekhova Kseniia <i>Ioffe Institute</i> Luminescence of defects in IIb diamond grown by the HPHT method using a precursor enriched with BaCO_3
11	Orlov Sergey <i>Prokhorov General Physics Institute</i> CARS-diagnostics of temperature during combustion of composite fuels

12	Pronin Igor <i>Ioffe Institute</i> Abnormally high second harmonic generation signal in spherulitic lead zirconate titanate thin films
13	Rogachevskaya Alexandra <i>Prokhorov General Physics Institute of the Russian Academy of Sciences</i> Laser induced breakdown spectrometry for online elemental analysis of scale-coated steel
14	Sergeeva Olga <i>Federal State Budget Educational Institution of Higher Education "Tver State University"</i> Diagnostics of the polarized state of a ferroelectric calcium orthovanadate crystal using modulated IR laser radiation
15	Zharova Yuliya <i>Ioffe Institute</i> From Ag Nanopillar–Nanoflower Arrays to Endotaxial Ag Nanoparticles in Si: Periodic Ordering via Lithographically Controlled Galvanic Displacement
16	Poletaeva Anastasia <i>National Research Nuclear University MEPhI</i> Dependence of the reflected radiation spectra on the preplasma conditions in the relativistic femtosecond laser interaction regime
17	Kudryavtsev Oleg <i>Prokhorov General Physics Institute of the Russian Academy of Sciences</i> New optical properties of nanodiamonds synthesized from hydrocarbons
18	Kudashkin Dmitry <i>Novosibirsk State University</i> Wavelength Tuning and Acoustic-Thermal Noise Suppression in a Random Fiber Laser Locked to an Active SNAP Microresonator
19	Kudashkin Dmitry <i>Novosibirsk State University</i> Neuromorphic Reservoir Computing Based on Distributed Random Fiber Laser Dynamics

Photonics in Quantum Technologies

1	Petrova Olga <i>D. I. Mendeleev Russian University of Chemical Technology</i> Luminescent and Scintillation Hybrid Materials in the LiF-Liq System and Film Based on Them
2	Reznikov Konstantin <i>AVESTA Ltd.</i> Fundamentals of Direct Multi-Wavelength Diode Pumping of Ti:Sapphire Lasers for Enhanced Optical-to-Optical Conversion Efficiency Across a Broad Spectral Range
3	Sabanin Artem <i>South Ural State University (national research university), Chelyabinsk, Russia</i> Application of nonlinear interferometry for gas sensing
4	Karimullin Kamil <i>Lebedev Physical Institute of the Russian Academy of Sciences, Branch in Troitsk</i> Study of the photophysical properties of semiconductor colloid quantum dots: fundamental and applied aspects
5	Naumov Andrey <i>Russian Academy of Sciences (Troitsk LPI, ISAN), Moscow Pedagogical State University (MPGU)</i> DNA-Origami Nanomaterials for Photonics, Quantum- and Nanotechnologies: Synthesis and Characterization
6	Naumov Andrey <i>Russian Academy of Sciences (Troitsk LPI, ISAN), Moscow Pedagogical State University (MPGU)</i> Laser Fluorescence Ratiometric Thermometry: Elimination of Key Methodological Artifacts and the Thermo-Memory Effect in Porphyrin Molecules

Nanophotonics

1	Alexey Kokhanovskiy <i>ITMO University</i> Numerical model of reflective phase–amplitude spatial light modulator based on GSST phase-change material
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2	Goriachuk Ivan <i>National Research Centre "Kurchatov Institute"</i> Investigation of up-converting fluoride nanocrystals using ultrahigh resolution UV microscopy technique
3	Sivkov Maksim <i>Faculty of Physics, Lomonosov Moscow State University</i> Enhancement of the Faraday Effect in the Inverted Au-Co/Pt Magnetoplasmonic Metasurface
4	Volkov Daniil <i>Mendeleev University of Chemical Technology of Russia (MUCTR)</i> Use of molybdenum Oxide (VI) as matrix for thin film organic-inorganic luminescent hybrid materials.
5	Zharova Yuliya <i>Ioffe Institute</i> From Ag Nanopillar–Nanoflower Arrays to Endotaxial Ag Nanoparticles in Si: Periodic Ordering via Lithographically Controlled Galvanic Displacement

Nonlinear and Terahertz Photonics

1	Akhmedzhanov Farkhad <i>Institute of Ion-Plasma and Laser Technologies, Academy of Sciences of Uzbekistan</i> Frequency and spatial dispersion of attenuation of acoustic waves in lanthanum gallosilicate crystals
2	Akhmedzhanov Farkhad <i>Institute of Ion-Plasma and Laser Technologies, Academy of Sciences of Uzbekistan</i> Anisotropy of photoelasticity in doped lead molybdate crystals
3	Bulavintseva Elizaveta <i>MIREA – Russian Technological University</i> Liquid-Phase Exfoliation of WS ₂ : A Scalable Approach for Terahertz Modulators
4	Galyuk Karina <i>Prokhorov General Physics Institute of the Russian Academy of Sciences</i> The influence of ultrashort pulse propagation on the optical properties of gases

5	Melentev Alexander <i>Moscow Institute of Physics and Technology, Dolgoprudny, Russia</i> Superconducting Terahertz Fabry–Pérot Resonators: Electrodynamic Characterization and Quality Factor Analysis Using Coupled-Mode Theory
6	Simonova Ekaterina <i>Sobolev Institute of Geology and Mineralogy SB RAS</i> Optical properties of β-BaB₂O₄ crystals grown in the BaB₂O₄-NaBaBO₃-BaMoO₄ system
7	Zhukova Elena <i>Moscow Institute of physics and technology</i> Advancing High-Q Superconducting THz Fabry–Perot Resonators: From BCS to high-Tc Reflectors
8	Zotova Irina <i>Institute of Applied Physics RAS</i> Simulations of Enhancing Output Characteristics of Megawatt-Class Gyrotrons via Frequency-Locking Techniques

