TERA 2018

3rd International Conference

Terahertz and Microwave Radiation: Generation, Detection and Applications

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October 22 – 25, 2018

Institute of Applied Physics of the Russian Academy of Sciences
46 Ulyanov Street · 603950 · Nizhny Novgorod · Russia

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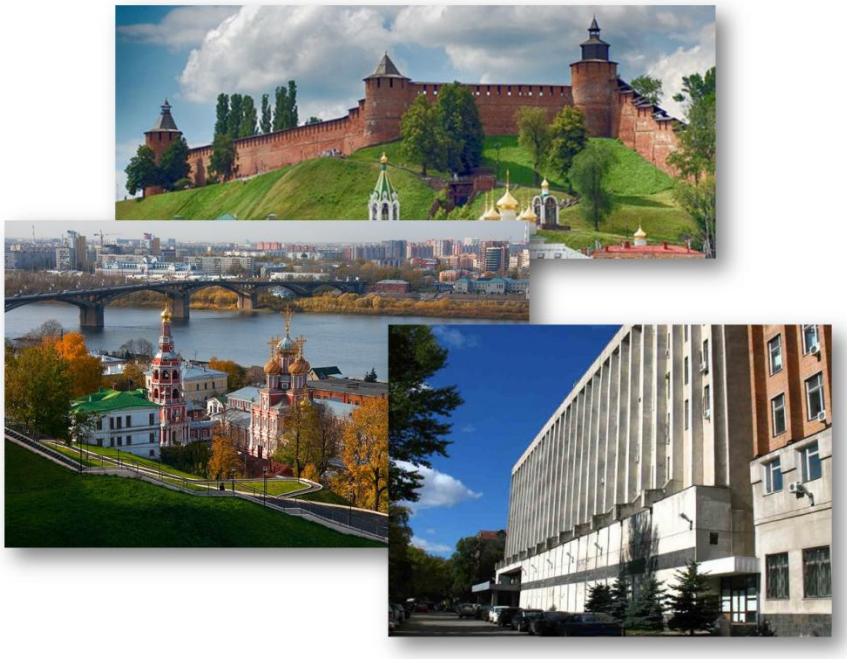

Conference Chairman
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The list of plenary lectures, accepted oral and poster talks by sections

The up-to-date list is available at the Conference website http://tera2018.ipfran.ru/

Institute of Applied Physics RAS

M.V. Lomonosov Moscow State University

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Conference Topics

S1. Electronic sources of THz & MW radiation, synchrotron radiation, free-electron lasers.

S2. Optoelectronic & solid-state sources of THz radiation.

S3. Generation of THz radiation by intense laser pulses

S4. Quantum cascade lasers.

S5. Detection of THz & MW radiation. Metrology in THz frequency range.

S6. Study of materials (including nano- and metamaterials) with the help of THz & MW radiation. Time-domain and CW spectroscopy.

S7. Interaction of high-power THz and MW radiation with matter. Application of THz radiation for the research and control of ultrafast process in physics, chemistry and biology.

S8. Terahertz & microwave imaging: tomography, holography and near-field microscopy.

S9. Systems of security and non-destructive control using THz and MW radiation. Remote sensing with THz radiation. Communication in THz frequency range.

S10. Medical and biological applications of THz radiation.

Special Events

E1. Symposium
FIR-LAB - INTERNATIONAL RESEARCH NETWORK "Bright Far-Infrared Optoelectronic Sources for Field-Matter Interaction Studies, Life Sciences and Environmental Monitoring".

E2. International Associated Laboratory
"Laboratory of Terahertz and Mid-Infrared Collective Phenomena in Semiconductor Nanostructures".

E3. Special Section
"Status of the User Facilities Centers"

Sec.	Name	Insitution/Country	Paper Title	Type
	Nikolay A. Vinokurov	Budker Institute of Nuclear Physics RAS, Novosibirsk, Russia	Generating High Power Terahertz and Far Infrared Electromagnetic Radiation with Relativistic Electrons	Plenary
	Gun-Sik Park	Seoul National University / South Korea	Investigations of hydration dynamics in biomedical systems using terahertz waves	Plenary
	Andrew K. Martusevich[1], Alexander V. Kostrov[2]	[1]Research Medical University of Volga region; [2]Institute of Applied Physics RAS / Nizhny Novgorod, Russia	Biomedical applications of microwave radiation: innovative approaches	Plenary
	Stelios Tzortzakis	Texas A&M University at Qatar & FORTH, Greece	Extreme THz fields from near and mid-infrared laser filaments	Plenary
	Chi Kuang Sun	National Taiwan University / Taiwan	Femtosecond Acoustics and Terahertz Ultrasonics	Plenary
	Alessandro Tredicucci	Università di Pisa, Pisa / Italy	Terahertz quantum cascade lasers: what way forward?	Plenary
E3	Young Uk Jeong	Korea Atomic Energy Research Institute, Daejeon / South Korea	Ultrafast THz-pump & Electron-probe Facility at KAERI	Keynote
E3	Oleg. A. Shevchenko	Budker Institute of Nuclear Physics RAS, Novosibirsk / Russia	Novosibirsk free electron laser facility	Keynote
E3	M.Glyavin, G.Denisov, E.Khazanov	Institute of Applied Physics RAS, Nizhny Novgorod / Russia	From millimeter to microns - IAP RAS powerful sources for various applications	Keynote
E3	Boris A. Knyazev	Budker Institute of Nuclear Physics RAS, Novosibirsk State University, Novosibirsk / Russia	Recent experiments at NovoFEL user stations	Keynote
E3	Harald Schneider	Institute of Ion-Beam Physics and Materials Research, Dresden / Germany	THz science at FELBE	Keynote
S01	Andrey Vasil'evich Arzhannikov	1-Budker Institute of Nuclear Physics Russian Academy of Science, Novosibirsk, Russia; 2 - Novosibirsk State University, Novosibirsk, Russia	High power THz-range Wave generation based on Transformation of Plasma Waves Pumped by High-current Relativistic Electron Beam	Oral
S01	Vladimir L'vovich Bratman	1-Institute of Applied Physics of RAS, Nizhny Novgorod, Russia, 2-Ariel University, Ariel, Israel	Prospective THz gyrotrons for high-field magneto-resonance spectroscopy	Oral
S01	Andrea Doria	ENEA / Italy	Novel Schemes for Compact FELs in the THz Region: ENEA Experience and Perspectives	Oral / Invited
S01	Andrey Dmitrievich Grigoriev	St. Petersburg Electrotechnical University "LETI" / Russia	Problems of amplifier klystron advancing into terahertz band	Oral
S01	Vladimir Manuilov	Nizhny Novgorod State University / Россия	Electron-optics systems with decreased life-time of trapped electrons for terahertz band gyrotrons	Oral
S01	Alexander Marek	Karlsruhe Institute of Technology / Germany	SIMULATION OF COMPONENTS FOR GYRO-DEVICES COUPLED IN A FEEDBACK LOOP TO GENERATE ULTRA-SHORT RF PULSES	Oral

Sec.	Name	Insitution/Country	Paper Title	Type
S01	Evgenee Anatol`evich Myasin	Fryazino branch of theKotel'nikov Instityte of Radioengineering and Electronics of RAS / Russia	SUBTHZ OROTRON WITH ONE AND TWO ELECTRON BEAMS	Oral
S01	Andrey L. Pankratov	Institute for Physics of Microstructures of Russian Academy of Sciences / Russia	Thermal regimes and THz generation from BSCCO mesas	Oral
S01	Gun-Sik Park	Seoul National University / South Korea	THz generation from high-Q Fano metallic metamaterial	Oral / Invited
S01	Pascale Roy	Synchrotron SOLEIL / France		Oral / Invited
S01	Tobias Ruess	Karlsruhe Institute of Technology / Germany	Towards Fully Automated Systems for the Generation of Very High Order Modes in Oversized Waveguides	Oral
S01	Nikita M. Ryskin	Saratov Branch, V.A. Kotel'nikov Institute of Radio Engineering and Electronics RAS / Russia	Development and modeling of miniaturized traveling-wave tubes in millimeter and sub-THz band	Oral
S01	Andrei Savilov	Institute of Applied Physics, Russian Academy of Sciences, Nizhniy Novgorod	THz radiation of stabilized dense electron bunches	Oral
S01	Dmitry I. Sobolev	Institute of Applied Physics, Russian Academy of Sciences, Nizhniy Novgorod / Russia	3D printed periodic structures for subterahertz sources	Oral
S01	Yoshinori Tatematsu	University of Fukui / Japan	Recent progress in development and application of sub-THz gyrotrons in University of Fukui	Oral / Invited
S01	Alexander Anatolievich Vikharev	Institute of Applied Physics, Russian Academy of Sciences, Nizhniy Novgorod / Russia	Generation of powerful subterahertz superradiance pulses for high gradient acceleration of charged particles	Oral
S01	Vladislav Yurievich Zaslavsky	Federal Research Center Institute of Applied Physics of the Russian Academy of Sciences (IAP RAS) / Russia	Terahertz-Range Gyrodevices of Planar Geometry	Oral
S01	Nikolai Yu. Peskov	Institute of Applied Physics, Russian Academy of Sciences, Nizhniy Novgorod / Russia	Development of powerful long-pulse Bragg FELs operating from sub-THz to THz bands based on linear induction accelerators: recent results and projects	Oral
S01	Naum Ginzburg	Institute of Applied Physics, Russian Academy of Sciences, Nizhniy Novgorod / Russia	Generation of Sub-Terahertz Surface Waves by Relativistic Electron Beams: Quasioptical Theory, Simulations and Experiments	Oral
S01	Asel Bulatovna Adilova	Saratov State University / Russia	Study of mutual phase locking of two gyrotrons coupled with delay	Poster
S01	Alexander Andronov	Institute for Physics of Microstructures RAS / Russia	Proposed Gyrotrons and FELs frequency distributed multiplication	Poster
S01	Artem Aleksandrovich Badarin	Yuri Gagarin State Technical University of Saratov / Russia	Double-Beam Millimeter-Wave Band BWT And TWT On A Spirally Bent Rectangular Waveguide	Poster

Sec.	Name	Insitution/Country	Paper Title	Type
S01	Mikhail Vladimirovich Morozkin	Institute of Applied Physics RAS / Russia	Development of the prototype of high power sub-THz gyrotron for advanced fusion power plant (DEMO)	Poster
S01	Roman Rozental	Institute of Applied Physics RAS / Russia	Rogue-waves generation in the terahertz region	Poster
S01	Roman Rozental	Institute of Applied Physics RAS / Russia	Gyrotrons with shortened cavities as tunable sources of powerful subterahertz radiation for spectroscopic applications	Poster
S01	Andrei Savilov	Institute of Applied Physics of Russian Academy of Sciences, Nizhny Novgorod, 603950 Russia	High-harmonic gyrotrons with irregular microwave systems	Poster
S01	Andrey Sergeevich Zuev	Institute of Applied Physics RAS / Russia	The third harmonic medium power W-band gyrorton for various applications	Poster
S01	Evgenee Anatol`evich Myasin	Fryazino branch of theKotel'nikov Instityte of Radioengineering and Electronics of RAS / Russian Federation	"UNKNOWN PECULIARITY OF THE OROTRON TWO ROW PERIODIC STRUCTURE "	Poster
S01	Leonid Sergeevich Revin	Institute for Physics of Microstructures of Russian Academy of Sciences / Nizhny Novgorod	YBa2Cu3O7−δ Josephson generators fabricated by preliminary topology masks	Poster
S01	Michael Nikolaevich Vilkov	Institute of Applied Physics RAS / Russian Federation	Generation of Ultrashort Microwave Pulses in Passive Mode-Locked Electron Oscillators with Homogeneous and Inhomogeneous Line Broadening	Poster
S01	Roman M Rozental	Institute of Applied Physics RAS / Россия	Generation of Ultra-Short Microwave Pulses in a Tunable Gyrotron with Subsequent Compression	Poster
S01	Andrey Fokin	Institute of Applied Physics RAS / Russia	Frequency control in subterahertz gyrotrons	Poster
S01	Alexey Fedotov	Institute of Applied Physics of the Russian Academy of Sciences / Russia	Design of three-mirror open cavity for 250-GHz cyclotron autoresonance maser project	Poster
S01	Alexey Fedotov	Institute of Applied Physics of the Russian Academy of Sciences / Russia	Design of medium-power W-band traveling-wave tube and backward-wave oscillator with sheet electron beam	Poster
S01	Igor Davidyuk	Budker INP / Russia	Fast magnetic measurements of 8.6 m undulator	Poster
S01	Vladislav Yurievich Zaslavsky	Federal Research Center Institute of Applied Physics of the Russian Academy of Sciences (IAP RAS) / Russian Federation	Powerful surface-wave oscillators with one-dimensional and two-dimensional periodic planar structures	Poster
S02	Vladimir Izyaslavovich Gavrilenko	Institute for Physics of Microstructures / Russia	THz stimulated emission at interband transitions in HgTe/CdHgTe quantum wells	Oral / Invited
S02	Yenchieh Huang	National Tsinghua University / Taiwan	Off-axis THz parametric oscillator	Oral
S02	Nickolay Vadimovich Kinev	Kotel'nikov Institute of Radio Engineering and Electronics of RAS / Russia	Wideband Josephson THz flux-flow oscillator integrated with the slot lens antenna and the harmonic mixer	Oral
S02	Alexander M. Klushin	IPM RAS / Russia	Evidence of synchronization of large Josephson-junction arrays by traveling electromagnetic waves	Oral
S02	Vladislav Kurin	Institute for physics of microstructures RAS / Russia	Active Josephson traveling wave antennae as prospective terahertz oscillators	Oral

Sec.	Name	Insitution/Country	Paper Title	Type
S02	Gaël MOURET	Université du Littoral Côte d'Opale / France	Frequency comb for THz metrology	Oral
S02	Dmitry Sergeevich Ponomarev	Institute of Ultra High Frequency Semiconductor Electronics RAS / Russia	Plasmonic terahertz antennas with high-aspect ratio metal gratings	Oral
S02	Viktor Ustinov	Ioffe Physical-Technical Institute RAS, St Petersburg, Russia / Russia	Molecular beam epitaxial growth of semiconductor heterostructures for THz electronics	Oral / Keynote
S02	Valery Shastin	Institute for Physics of Microstructures,Russian Academy of Sciences / Russia	Terahertz lasers based on donor intracenter transitions in silicon.	Oral / Invited
S02	Edik Rafailov	Aston University / United Kingdom	Towards efficient and tunable generation of THz radiation from quantum dot based ultrafast photoconductive antennae.	Oral / Invited
S02	Miron Solomonovich Kagan	V.A. Kotel'nikov Institute of Radio Engineering and Electronics / Russia	Electronic Tunneling and Electric Domains in GaAs/AlAs Superlattices at Room Temperature	Poster
S02	Stanislav Konstantinovich Paprotsky	V.A. Kotel'nikov Institute of Radio Engineering and Electronics / Russia	High Photoconductivity in Heavily Doped GaAs/AlAs Superlattices with Electric Domains	Poster
S02	Maxim L. Kulygin	Institute of Applied Physics RAS / Russia	Long-Pulsed Modulation Regimes of Subterahertz Nanosecond Waveguide Switches	Poster
S02	Andrey Alexandrovich Leontyev	Lomonosov Moscow State University / Russian Federation	Photoconductive antennas based on epitaxial films InGaAs on GaAs (111)A and (100) substrates with a metamorphic buffer.	Poster
S02	Nikolai Yu. Peskov	IAP RAS / Russia	Theoretical and experimental studies of dielectric two-dimensional Bragg structures for development of spatially-extended heterolasers	Poster
S02	Vladimir V. Rumyantsev	IAP RAS / Russia	Terahertz frequency multipliers employing lattice nonlinearity in semiconductors	Poster
S03	Sergey Bodrov	Institute of Applied Physics, Russian Academy of Sciences, Nizhniy Novgorod / Russia	A modified tilted-pulse-front excitation scheme for efficient terahertz generation in LiNbO3	Oral
S03	Andrey Brantov	P.N.Lebedev Physical Institute of RAS / Russia	Laser induced THz Sommerfeld waves along metal wire.	Oral
S03	Pavel Alekseevich Chizhov	General Physics Institute RAS / Russia	Modulation of two-color laser-induced filament terahertz emission by effective length variation.	Oral
S03	Kodo Kawase	Nagoya University / Japan	Multi wavelength injection-seeded THz parametric system	Oral / Invited
S03	Andrey Kuratov	Center of Fundamental and Applied Research, VNIIA / Russia	Plasma mechanisms of terahertz electromagnetic wave generation due to intense laser-plasma interaction	Oral
S03	Ivan V. Oladyshkin	Institute of Applied Physics, Russian Academy of Sciences, Nizhniy Novgorod / Russia	Role of surface plasmons in laser-induced THz generation from metals	Oral
S03	Tsuneyuki Ozaki	Institut national de la recherche scientifique, Quebec / Canada	THz nonlinear optics in the sub-cycle regime	Oral / Keynote

Sec.	Name	Insitution/Country	Paper Title	Type
S03	Alexander Popov	Srobeltsyn Institute of Nuclear Physics, Moscow State University / Russia	New Approach to Generation and Amplification of the THz Radiation in Plasma Created by Intense Two-Color Laser Fields	Oral / Invited
S03	Fabian Rotermund	KAIST / South Korea	THz nonlinear photonics: generation and applications	Oral / Invited
S03	Alexander A. Silaev	Institute of Applied Physics, Russian Academy of Sciences, Nizhniy Novgorod / Russia	Laser-plasma generation of tunable ultrashort pulses in terahertz and mid-infrared ranges	Oral
S03	Stefan Skupin	Institut Lumière Matière, Université Lyon 1 - CNRS / France	Resonant Effects in Terahertz Generation with Laser-Induced Gas Plasmas	Oral / Invited
S03	Sergey Stremoukhov	National Research Centre “Kurchatov Institute” / Russia	Terahertz radiation in two-color laser fields: from single atom to extended gas response	Oral
S03	Aleksandr Ushakov	A.M. Prokhorov General Physics Institute / Russia	Backward terahertz emission from two-color laser induced plasma spark	Oral
S03	Abel Woldegeorgis	Helmholtz-Institut Jena / Germany	Generation of sub GV/m longitudinal terahertz electric fields from intense laser-solid density plasma interactions	Oral
S03	Dongwen Zhang	National University of Defense Technology, Changsha / China	Coherent multichannel dynamics of aligned molecules resolved by two dimensional high-harmonic and terahertz spectroscopy (2D-HATS)	Oral / Invited
S03	Matteo Clerici	University of Glasgow / UK	Broadband THz generation and detection	Oral / Invited
S03	Alexander A. Frolov	Joint Institute for High Temperatures, Russian Academy of Sciences / Russia	The dipole mechanism of terahertz waves emission under laser action on clasters	Poster
S03	Bong Joo Kang	Korea Advanced Institute of Science and Technology (KAIST) / South Korea	Manipulation of Highly Nonlinear Organic Crystals for Efficient Optical-to-THz Conversion	Poster
S03	Evgeny Viktorovich Moiseenko	Nuclear Safety Institute of the Russian Academy of Sciences / Russia	"Temperature variation in the process of terahertz wave generation by intense laser pulses "	Poster
S03	Sergey Alexandrovich Sychugin	University of Nizhny Novgorod / Russia	Generation of DC fields ahead of ultrashort laser pulses in electro-optic crystals	Poster
S03	Nikolai Nikolaevich Yudin	Laboratory of Optical Crystals, Tomsk / Russia	Generation of broadband terahertz radiation in ZnGeP2 by optical rectification	Poster
S03	Nikolai Nikolaevich Yudin	National Research Tomsk State University / Russia	Generation of terahertz radiation on the difference frequency in Zngep2	Poster
S03	Alexander A. Silaev	Institute of Applied Physics RAS / Russia	"Quantum-mechanical simulations of low-frequency current excitation during ionization of many-electron atoms by intense laser pulses "	Poster
S03	Osovitskaya Irina Vladimirovna	Institute of Applied Phyisics, Russian Academy of Sciences / Russia	Interplay effects of carrier-envelope phase and plasmon resonances in terahertz generation by ionizing ultrashort optical pulses	Poster
S04	Alexander Alexandrovich Andronov	Insitute for Physics of Microstructures RAS / Russia	Bloch and Wannier-Stark THz emissions in superlattices: rival of Quantum Cascade Laser?	Oral
S04	Rostislav M. Arkhipov	St. Petersburg State University / Russia	Generation of ultra-short pulses via self-induced transparency mode-locking regime in lasers	Oral / Invited

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S04	Andrey V. Babichev	Connector Optics LLC, Moscow / Russia	Quantum-cascade lasers of mid-IR spectral range: epitaxy, diagnostics and device characteristics	Oral / Invited
S04	Alexei N Baranov	IES, University of Montpellier / France	Long wavelength InAs-based quantum cascade lasers.	Oral / Keynote
S04	Rustam Khabibullin	V.G. Mokerov Institute of ultra high frequency semiconductor electronics of RAS / Russia	Terahertz quantum cascade laser with silver- and gold-based waveguide	Oral / Invited
S04	Andrey Khudchenko	University of Groningen / NOVA / Netherlands	Phase-locking Techniques for THz Quantum Cascade Lasers	Oral / Invited
S04	Yury Lobanov	Moscow State Pedagogical University / Russia	Characterization of the THz QCL Using Fast Superconducting Hot Electron Bolometer	Oral
S04	Kirill Maremyanin	Institute for Physics of Microstructures RAS / Russia	Investigation of the emission spectra of pulsed THz quantum cascade lasers and their use for magnetospectroscopy of semiconductors	Oral
S04	Maxim Nazarov	Kurchatov Institute / Russia	Polymer waveguides for THz QCL radiation delivery and filtering	Oral / Invited
S04	Ivan S Vasil'evskii	National Research Nuclear University MEPhI / Russia	Temporal stability and absolute composition issues in molecular beam epitaxy of AlGaAs/GaAs THz QCL	Oral
S04	Fedor Zubov	St Petersburg National Research Academic University of the Russian Academy of Sciences / Россия	3 THz quantum-cascade laser with metallic waveguide based on resonant-phonon depopulation scheme	Oral
S04	Luigi Consolino	CNR-INO, Firenze / Italy	Metrological-grade THz radiation	Oral / Invited
S04	Alexander A. Andronov	Institute for Physics of Microstructures RAS / Russia	THz Quantum Cascade Laser cavities emission beams and losses	Poster
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S05	Anna Bogatskaya	Skobeltsyn Institute of Nuclear Physics, Moscow State University / Russia	Optical-mechanical analogy approach for the purposes of detection of IR-MW radiation	Oral
S05	Igor Ilyakov	Institute of Applied Physics, Russian Academy of Sciences, Nizhniy Novgorod / Russia	Terahertz Electro-Optic Sampling in Crystals with High Natural Birefringence	Oral
S05	Andrey Khudchenko	University of Groningen / NOVA / Netherlands	Sideband Separating SIS receiver for 650 GHz developed by NOVA	Oral
S05	Galiya Khasanovna Kitaeva	Lomonosov Moscow State University / Russia	Optical – terahertz biphotons	Oral / Invited
S05	Valery Koshelets	Kotel'nikov Institute of Radio Engineering and Electronics RAS, Moscow / Russia	Low-noise THz-range SIS Receivers for Ground-based and Space Radio Astronomy	Oral
S05	Leonid Sergeevicn Kuzmin	Nizhny Novgorod State Technical University n.a. R.E. Alekseev / Russia	Efficient Electron Self-Cooling in Cold-Electron Bolometers	Oral
S05	Alexander Mamrashev	Institute of Automation and Electrometry SB RAS / Russia	Terahertz time-domain spectrometer with precision delay line encoder	Oral
S05	Kirill Rudakov	Kapteyn Astronomical Institute	Superconducting thin-film THz structures development based on SIS junctions	Oral

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S05	Alexander Sergeevich Sobolev	Kotel'nikov Institute of Radio Engineering and Electronics RAS, Moscow / Russia	Wideband metamaterial-based array of SINIS bolometers	Oral
S05	Vyacheslav Vdovin	Institute of Applied Physics, Russian Academy of Sciences, Nizhniy Novgorod / Russia	Arrays of annular antennas with SINIS bolometers for SubTHz radioastronomy	Oral
S05	Valery Koshelets	Kotel'nikov Institute of Radio Engineering and Electronics RAS / Russia	Spectral measurements of THz radiation emitted from intrinsic Josephson junction stacks	Poster
S05	Maxim Philippov	LPI RAS / RUSSIA	Future scientific experiment “SUN-TERAGERZ"	Poster
S05	Ivan Tretyakov	Moscow State Pedagogical University / Россия	Technology for NbN HEB based multipixel matrix of THz range	Poster
S05	Andrey Trifonov	Moscow State Pedagogical University / Russia	Geometry dependence of IF bandwidth performance of NbN HEB mixers integrated with GaN acoustic matching layer.	Poster
S05	Grigory Yakopov	Специальная астрофизическая обсерватория Российской академии наук / russia	Characterization of SubTHz planar antennas with SINIS bolometers for optical 6 meter reflector BTA	Poster
S05	Vsevolod Belosevich	MIPT / Russia	Response of carbon nanotube film transistor to the THz radiation	Poster
S05	Tatyana Igorevna Novikova	Lomonosov Moscow State University / Russia	Temperature dependence of signal spectra generated via spontaneous parametric down-conversion in strongly frequency non-degenerate regime	Poster
S05	Alexander Shugurov	University of Nizhny Novgorod / Russia	Terahertz pulse detection by direct intensity modulation of the probe laser beam in GaAs	Poster
S06	Robin Bocquet	University of Littoral / France	Developments on a 200 GHz chirped pulse experiment at Dunkerque	Oral / Invited
S06	Sergey Bodrov	Institute of Applied Physics, Russian Academy of Sciences, Nizhniy Novgorod / Russia	Terahertz induced optical second harmonic generation from dielectric interfaces: mechanism and application	Oral
S06	Alexander Boris	Max Planck Institute for Solid State Research / Germany	Exploring in-gap excitations in high-Tc superconducting films by THz and infrared spectroscopy	Oral / Invited
S06	Evgeniy N. Chesnokov	ICK&C SB RAS / Russia	The first observation of the free induction signals of OH radicals in the terahertz region	Oral / Invited
S06	Marat Gafurov	Kazan Federal University / Russia	Coherent control of electron-nuclear states of rare-earth ions in crystals using radio-frequency and microwave radiation.	Oral
S06	Mikhail K. Khodzitsky	ITMO University / Russia	Optically tunable dielectric properties of single-walled carbon nanotubes for terahertz wave applications	Oral
S06	Maksim Koshelev	Institute of Applied Physics, Russian Academy of Sciences, Nizhniy Novgorod / Russia	Accurate broadband THz molecular spectroscopy	Oral
S06	Konstantin Aleksandrovich Motovilov	Moscow Institute of Physics and Technology, Dolgoprudny, Russia / Russia	Water and conductivity in bioorganic materials: complicated interplay	Oral / Invited

Sec.	Name	Insitution/Country	Paper Title	Type
S06	Alexey Nikitin	Scientific and Technological Center of Unique Instrumentation of the Russian Academy of Sciences / Russia	Terahertz plasmonics: achievements and prospects	Oral / Invited
S06	Nazar Nikolaev	Institute of Automation and Electrometry SB RAS / Russia	Angle-Susceptible Sensing Metasurface in Terahertz Regime	Oral
S06	Tatyana Anatol'evna Odintsova	Institute of Applied Physics, Russian Academy of Sciences, Nizhniy Novgorod / Russia	Far IR continuum absorption of H216O and H218O	Oral
S06	Viacheslav Valentinovich Popov	Saratov Branch of the Kotelnikov Institute of Radioengeneering and Electronics of RAS / Россия	Terahertz plasmonic photocurrents in graphene nanostructures	Oral
S06	Oleg Iosifovich Potaturkin	Institute of Automation and Electrometry SB RAS / Russia	Oxide nonlinear crystals: optical properties and phase-matching for terahertz wave generation	Oral / Invited
S06	Leonid Surin	Institute for Spectroscopy RAS, Troitsk, Moscow / Russia	Millimeter-wave spectroscopy of weakly bound molecular complexes and small clusters	Oral / Invited
S06	Alexander Tsvetkov	Institute of Applied Physics, Russian Academy of Sciences, Nizhniy Novgorod / Russia	Recent results on THz gyrotron-based molecular spectroscopy	Oral
S06	Elena S Zhukova	Moscow Institue of Physics and Technology / Russia	H2O molecules hosted by a crystalline matrix – new state of water.	Oral / Invited
S06	Evgeny Aleksandrovich Serov	Institute of Applied Physics, Russian Academy of Sciences, Nizhniy Novgorod / Russia	Dielectrics for output windows of medium power gyrotrons	Oral
S06	Valeria Dmitryevna Kukotenko	Budker institute of nuclear physics / Russia	One color pump-probe setup at the NovoFEL facility for measurements of carrier relaxation processes in semiconductors	Poster
S06	Robert David Dawson	Max Planck Institute for Solid State Research / Germany	Closing the terahertz gap: a composite approach toward measuring continuous dielectric functions from microwave to visible wavelengths	Poster
S06	Petr Sergeevich Demchenko	ITMO University / Russian	Study of influence of densification on control of conductivity and spectral characteristics of thin films of carbon nanotubes in terahertz frequency range	Poster
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S06	Kirill Kuznetsov	M.V. Lomoosov Moscow State University / Russia	Generation of terahertz pulses from the island films of topological insulator Bi2-xSbxTe3-ySey	Poster
S06	Ivan Andreevich Tzibizov	Tydex LLC / Russian Federation	Investigation of the properties of a 3-level broadband antireflective structure on silicon by THz time-domain spectroscopy.	Poster
S06	Arsenii Alekseevich Gavdush	Prokhorov General Physics Institute of RAS, Moscow, 119991, Russia / Russia	Terahertz time-domain spectroscopy of astrophysical ice analogs: A pilot study	Poster
S06	Alexander Grebenchukov	ITMO University / Russia	Terahertz spectroscopy of graphene-based materials on different substrates under external infrared optical pumping	Poster

Sec.	Name	Insitution/Country	Paper Title	Type
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S06	Ekaterina Malkova	Lomonosov Moscow State University / Russia	Nonlinear quantum interferometry in terahertz spectroscopy	Poster
S06	Maxim S Masyukov	ITMO University / Russia	Geometry impact on polarizing properties of terahertz chiral metasurface	Poster
S06	Yuriy Sergeev	Institute of Applied Physics of the Russian Academy of Sciences	Terahertz induced optical second harmonic generation from silicon surface	Poster
S06	Tatyana Krapivnitskaia	Institute of Applied Physics of the Russian Academy of Sciences / Russia	Pulsed magnets with high field intensity for laser-plasma experiments and TDS spectroscopy	Poster
S06	Andrey Mikhailovich Malkin	Institute of Applied Physics RAS / Россия	Terahertz Range Surface-Wave Bragg Resonators with Optimized Ratio between Ohmic and Radiative Losses	Poster
S06	Evgeny Aleksandrovich Serov	Institute of Applied Physics of the Russian Academy of Sciences / Russia	Ceramic materials for microwave applications	Poster
S07	Oleg Vladimirovich Chefonov	Joint Institute for High Temperatures of the Russian Academy of Sciences / Russia	INTERACTION OF HIGH-POWER TERAHERTZ RADIATION WITH METALLIC FILMS	Oral
S07	Sergei Arkadevich Kozlov	ITMO University / Russia	Disappearance of Self-Focusing for Few-Cycle THz Pulses	Oral / Invited
S07	Maria Krikunova	Fysikální úELI-Beamlines, Za Radnicí 835, 252 41 Dolní Břežany, Czech Republic / Germany	Ultrafast multi-electron dynamics studied with THz-field streaking	Oral
S07	Vitaly Kubarev	Budker Institute of Nuclear Physics / Russia	Experiments using extreme parameters of NovoFEL radiation	Oral / Invited
S07	Evgeny A. Mashkovich	Radboud University, Nijmegen / The Netherlands	Terahertz induced magnetization dynamic in a weak ferromagnet FeBO3	Oral
S07	Vladimir S. Pavelyev	Samara National Research University / Russia	Terahertz optical elements for control of high-power laser irradiation	Oral / Keynote
S07	Sergey Pavlov	Institute of Optical Sensor Systems, German Aerospace Center (DLR), Berlin / Germany	Challenges of Raman scattering at THz frequencies	Oral
S07	Andrey Savel'ev	Lomonosov Moscow State University / Russia	Nonlinear Transfer of Intense Few Cycle Terahertz Pulse Through Opaque semiconductors	Oral / Invited
S07	Roman Kh. Zhukavin	IPM RAS / Russia	Relaxation of Coulomb states in semiconductors probed by FEL radiation	Oral
S07	Natalya Osintseva	Budker Institute of Nuclear Physics SB RAS, Novosibirsk / Russia	Vector and mixed beams with orbital angular momentum	Poster
S08	Irina Dolganova	Bauman Moscow State Technical University / Russia	Impact of Scattering in Quasi-Ordered Structures on THz Imaging	Oral
S08	Weiwei Liu	Institute of Modern optics, Nankai University / China	Subwavelength resolution THz imaging by femtosecond laser filament	Oral / Invited

Sec.	Name	Insitution/Country	Paper Title	Type
S08	Andrew Kimovich Martusevich	Research Medical University of Volga region / Russia	Comparative study of dielectric properties of the skin of human and laboratory animals	Oral
S08	Dmitriy Valentinovich Yanin	Federal Research Center Institute of Applied Physics of the Russian Academy of Sciences (IAP RAS) / Russian Federation	Subsurface diagnostics of quasi-one-dimensional inhomogeneities using the method of near-field microwave sounding	Poster
S08	Dmitriy Valentinovich Yanin	Federal Research Center Institute of Applied Physics of the Russian Academy of Sciences (IAP RAS) / Russian Federation	Diagnostics of of biological tissues by methods of near-field microwave - sounding	Poster
S08	Oleg Kameshkov	Budker Institute of Nuclear Physics RAS & Novosibirsk State University / Russia	Generation of vortex beamlet lattices via diffraction of Bessel vortex beams on 2D hole arrays: analytical and numerical calculations and comparison with experiments	Poster
S08	Andrew Kimovich Martusevich	Research Medical University of Volga region / Russia	Microwave imaging of skin damage at experimental burns	Poster
S08	Andrew Kimovich Martusevich	Research Medical University of Volga region / Russia	Diagnostic value of microwave imaging of dielectric tissues properties in patients with Dupuitren disease	Poster
S09	Andrew Angeluts	Faculty of Physics M.V. Lomonosov Moscow State University / Russia	IInfluence of pollution and extraneous inclusions on the scattering of THz radiation by fabric	Oral
S09	Yulia Choporova	Budker institute of nuclear physics / Russia	Measuring the topological charge of vortices with diffraction and interference tecniques	Oral
S09	Dmitrii Pavelev	Lobachevsky State University, Nizhny Novgorod / Russia	Devices and system based on quantum semiconductor superlattices for the frequency range 0.1-10 THz.	Oral
S09	Leonid Aleksandrovich Skvortsov	JSC "Polyus Research Institute of M.F. Stelmakh", Moscow / Russia	The concept of construction of inspection systems based on quantum-cascade lasers	Oral
S09	Vyacheslav Trofimov	South China University of Technology, Guangzhou, China; Lomonosov Moscow State University, Russia	Detection and identification of a substance with an inhomogeneous surface using the effective time-dependent THz spectroscopy method and emission frequency up-conversion	Oral / Invited
S09	Alexander Tsvetkov	Institute of Applied Physics, Russian Academy of Sciences, Nizhniy Novgorod / Russia	Using a gyrotron as a source of modulated radiation for data transmission systems in the terahertz range	Oral
S09	Grigoriy Bubnov	Institute of Applied Physics RAS / Russia	Svalbard astroclimate research: expedition and first results.	Poster
S09	Ilya Viktorovich Lesnov	Institute of Applied Physics RAS / Russia	Investigation of the influence of the location on the rate of Sub THz space communications channels	Poster
S09	Kamil Abdikerimovich Moldosanov	Kyrgyz-Russian Slavic University, Bishkek / Kyrgyzstan	Two-phonon scheme of generating soft terahertz radiation by gold nanobars for detection of hidden objects	Poster

Sec.	Name	Insitution/Country	Paper Title	Type
S09	Gleb Katyba	(1) Institute of Solid State Physics RAS, Chernogolovka, 142432, Russia (2) Bauman Moscow State Technical University, Moscow, 105005, Russia (3) Prokhorov General Physics Institute of RAS, Moscow, 119991, Russia (4) Ecole Polytechnique de Montreal, Montreal, Quebec H3T 1J4, Canada / Russia	Microstructures sapphire shaped crystals for anitiresonant and bandgap terahertz waveguiding	Poster
S10	Olga Pavlovna Cherkasova	1-Institute of Laser Physics of SB RAS, Novosibirsk, 630090, Russia; 2-Tomsk State University, Tomsk, 634050, Russia	Study of blood and its components by terahertz pulsed spectroscopy	Oral / Invited
S10	Nikita Viktorovich Chernomyrdin	Bauman Moscow State Technical University / Russia	Biomedical applications of terahertz solid immersion microscopy	Oral
S10	Vasyl Denysenkov	Goethe University Frankfurt / Germany	DNP APPLICATIONS AT 9.4 TESLA BY USING TERAHERTZ IRRADIATION	Oral
S10	Yury Vladimirovich Kistenev	Tomsk State University, Tomsk, Russia	Applications of THz laser spectroscopy and machine learning for medical diagnostics	Oral / Invited
S10	Ilya Ozheredov	Lomonosov Moscow State University, Moscow, Russia	Application of THz radiation for in situ control of eye cornea hydration level	Oral / Invited
S10	Alla Georgievna Polyakova	Federal State Budgetary Educational Institution of Higher Education «Privolzhsky Research Medical University» of the Ministry of Health of the Russian Federation / Russia	The mechanism of action of microwave radiation on the parameters of homeostasis in living systems	Oral
S10	Andrei V. Postnikov	LCP-A2MC, Jean Barriol Institute, University of Lorraine / France	A device to inspect a skin cancer tumour in the terahertz range, transferring the image into the infrared	Oral
S10	Olga A. Smolyanskaya	ITMO University, Saint-Petersburg 199004, Russia	Complex study of interaction of terahertz radiation with bio-like objects: theoretical and numerical modelling, real objects and phantom experiments	Oral / Invited
S10	Vladimir Vaks	Institute of Applied Physics, Russian Academy of Sciences, Nizhniy Novgorod / Russia	High resolution terahertz spectroscopy for medical, biological and agricultural applications	Oral / Invited
S10	Kirill Zaytsev	Prokhorov General Physics Institute of RAS (GPI RAS) / Russia	Intraoperative diagnosis of malignant brain gliomas using terahertz pulsed spectroscopy and optical coherence tomography	Oral / Invited
S10	Maxim Michailovich Nazarov	NRC Kurchatov Institute / Russia	Solutions spectroscopy in the extended THz frequency range	Oral / Invited
S10	Mikhail K. Khodzitsky	ITMO University / Russia	THz time-domain spectroscopy for non-invasive assessment of water content in biological samples	Oral

Sec.	Name	Insitution/Country	Paper Title	Type
S10	Vladimir Evgenjevich Zapevalov	Institute of Applied Physics, Russian Academy of Sciences, Nizhniy Novgorod	High-power microwaves against locusts and other harmful animals	Oral
S10	Arina Alexandrovna Avseenko	ITMO University / Russia	Definition of thresholds of the heating effects of THz radiation on cancer cells.	Poster
S10	Vasyl Denysenkov	Goethe University Frankfurt / Germany	COMPACT DNP POLARIZER FOR MRI APPLICATIONS AT 1.5 TESLA	Poster
S10	Ida Leonidovna Kublanova	ITMO University / Russia	The research method of a qualitative analysis of the composition of the blood in the terahertz frequency range.	Poster
S10	Vladimir Alekseevich Anfertev	IPM RAS / Russia	Application of high resolution subTHz spectroscopy methods for analysing the content of grain odors	Poster
S10	Sviatoslav Igorevich Gusev	ITMO University / Russian Federation	Investigation of interaction of THz radiation with blood components for diabetes mellitus diagnostics	Poster
S10	Anna Semenova	IPM RAS / Russia	THz absorption spectra of glucoze and its polimers	Poster
S10	Tianmiao Zhang	ITMO University / Russia	Study of PVC-based Skin Phantom with graphite particles in Terahertz Frequency Range	Poster
S10	Marina Vladimirovna Presnyakova	Federal State Budgetary Educational Institution of Higher Education «Privolzhsky Research Medical University» of the Ministry of Health of the Russian Federation / Russia	Study of biochemical and hemostasiological parameters under the influence of low-intensity microwave noise radiation	Poster
S10	Anna Gennadevna Soloveva	Federal State Budgetary Educational Institution of Higher Education «Privolzhsky Research Medical University» of the Ministry of Health of the Russian Federation / Russian Federation	The influence of terahertz radiation on biochemical metabolism of blood in the experiment	