

28 February 2023, Tuesday

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16.00-18.00	Poster session (Winter Garden)
Number	Properties of materials in the terahertz and microwave frequency ranges
1-1	Optical properties of a GUHP crystal promising as a terahertz radiation source Sofya A. Bychkova
1-2	Scattering of the field of fast electrons on coupled nanoparticles Damir I. Garayev
1-3	Impact of air atmosphere on the conditions for the synthesis of ceramic materials in the interaction of a microwave pulse of a gyrotron with a mixture of Al ₂ O ₃ /Al powders Zakhar A. Zakletsky
1-4	Measurement of transmission at terahertz frequencies for materials with a very high transparency Grigory P. Nazarov
1-5	Numerical estimate of temperature influence on non-reciprocal propagation of terahertz radiation through InSb, InAs, GaAs Mikhail G. Novoselov
1-6	Dispersion of α -pinene nonlinear refractive index coefficient in THz spectral range Egor N. Oparin
1-7	3D printed terahertz GRIN lenses Vladislav V. Pesnyakov
1-8	Dynamics of Charge Carriers in THz Photoconductive Antennas based on Si-doped GaAs (111)A Sergey S. Pushkarev
1-9	Radiation from a metasurface as an instrument for electron bunch diagnostics Darya Yu. Sergeeva
Number	Strong terahertz fields and nonlinear terahertz photonics
2-1	Domination of Cubic Nonlinear Effects over Quadratic Ones in the THz Spectral Range Mikhail S. Guselnikov
2-2	The Use of Brunel Harmonics Generation by Elliptically Polarized Laser Pulses for High-Resolved Detection of Lower-Frequency Radiation Alexander A. Silaev
Number	Terahertz and microwave radiation in megascience research facilities and high power equipment
3-1	Study of the Phase Locking of High-Power Gyrotron Oscillators Coupled with Delay Asel B. Adilova
3-2	Acceleration of a relativistic electron in a unipolar pulse Dmitry V. Gavrilenko
3-3	Micro-undulator for the X-ray FEL based on plasma accelerator Nikolay Yu. Peskov
3-4	Sub-Terahertz Quasi-Optical Gyro-BWO With One-Octave Frequency Tuning Band Sergey V. Samsonov
3-5	Experimental Testing of 0.7 THz Modified Cylindrical Bragg Structures Based on the Coupling of Propagating and Cut-Off Modes Dmitry I. Sobolev
3-6	Prospects of wideband frequency tuning in multi-beam sub-THz gyrotrons Andrey Fokin

3-7	The technological requirements for the manufacturing of modern gyrotron resonators Andrey Fokin
3-8	Generation of Train of THz Superradiant Pulses in the Process of Stimulated Backscattering of Laser Pulse Circulating in Fabry-Perot Resonator Lev A. Yurovsky
Number	Terahertz biophotonics and biomedicine
4-1	Experimental study of the vascular bed of tumors of different morphogenesis Anna M. Glyavina
4-2	The effect of terahertz radiation on the blood antioxidant status in experimental thermal injury Natalia V. Didenko
4-3	Analysis of spectral characteristics of collagen solutions in THz spectrum region Anastasia I. Knyazkova
4-4	Microwave monitoring of organ viability during transplantation Vladimir V. Nazarov
4-5	Study of the effect of terahertz radiation on the processes of tissue ischemia in an experiment Anna G. Solovyova
4-6	The influence of argon cold plasma on dielectric properties of the rats' skin Alexandra V. Surovegina
4-7	Detection of glioma molecular markers by terahertz nanoantenna sensor Olga P. Cherkasova
Number	Components of microwave and terahertz systems
5-1	Thermally Isolated Ruthenium Nanobolometer for Room-Temperature Terahertz Sensing Alexey Ilyin
5-2	Magnetically controlled band-pass filter of terahertz radiation Zakhar S. Kochnev
5-3	Design of a narrowband terahertz filter based on Fabry–Pérot etalon Alina A. Rybak
5-4	Tapered Coupling Interface for a THz Integrated Waveguide Sergey V. Seliverstov
Number	Applications of terahertz and microwave radiation
6-1	Stationary flow of dense magnetized plasma with multiply charged ions supported by strong THz-radiation Ilya S. Abramov
6-2	Using Radio Interferometry for Measuring Free Surface Velocity in Impact Experiment Kirill V. Mineev
6-3	Problems of Sub-Terahertz Astroclimate Research and Development of Optimal Receivers for Measurements of Atmospheric Propagation Kirill V. Mineev
6-4	Broadband and narrowband laser-based terahertz source and its application for second harmonic generation in centrosymmetric antiferromagnet NiO Dmitry S. Sitnikov
6-5	Microwave Interferometry of Chemically Active Plasma Nikita V. Chekmarev
Number	Terahertz and microwave spectroscopy
7-1	Investigation of THz radiation parameters in Co/WSe ₂ and Co/IrMn ₃ structures Ekaterina D. Lebedeva
Number	Terahertz and microwave systems

8-1	Development and Experimental Study of a Powerful Gyrotron Complex with a Generation Frequency of 32.9 GHz <i>Andrey A. Ananichev</i>
8-2	Numerical simulation of a gyrotron with a quasi-optical resonator for spectroscopic applications <i>Andrey A. Ananichev</i>
8-3	Frequency tuning in terahertz quantum cascade lasers induced by current and temperature <i>Dmitry A. Belov</i>
8-4	Terahertz detector based on microstructured bismuth-antimony <i>Pyotr S. Demchenko</i>
8-5	Increasing efficiency of the terahertz generation in Mg:LiNbO ₃ crystal by optimizing the angular distribution of the output radiation <i>Dmitry A. Markov</i>
8-6	Plasmon properties of graphene with an arbitrary directed electric current <i>Ilya M. Moiseenko</i>
8-7	Application of covariation measurement for calibration of quantum efficiency of analog detectors <i>Tatiana Novikova</i>
8-8	Standard-free measurement of quantum efficiency in the case of an analog detector <i>Daniil A. Safronenko</i>
8-9	Terahertz generation optimization in a OH1 nonlinear organic crystal pumped by a Cr:forsterite laser <i>Dmitry S. Sitnikov</i>
8-10	Reflectometric indication of polariton resonance on the InSb surface irradiated by terahertz radiation <i>Ildus Sh. Khasanov</i>
8-11	Terahertz wave detecting in GaSe:S crystals at a telecom wavelength <i>Olesya N. Shevchenko</i>
Number	Terahertz and microwave radiation in electronics
9-1	The First Experimental Tests of a High-Current Relativistic Millimeter-Wave Gyrotron with Magnetic Compression Electron Gun <i>Kirill V. Mineev</i>
9-2	Auto-Modulation Oscillations in a Gyrotron with a Complicated Cavity <i>Andrey V. Savilov</i>
9-3	Analysis of the metallization quality of 3D-printed microwave components at millimeter wavelengths <i>Alexey Fedotov</i>