

## SPb-POEM 2020 Online Conference Program

27th of April	
<b>12.30 - 12.35</b>	<b>Opening Ceremony</b>
12.35 - 13.05	Giordani S. <i>Smart Carbon Nano Onions for Biomedical Applications</i>
<b>13.05 - 14.25</b>	<b>2D Materials Symposium</b>
13.05 - 13.25	Xiaoyu Jia. <i>Kinetic Ionic Permeation and Interfacial Doping of Supported Graphene.</i>
13.25 - 13.45	Yue Wang. <i>Two dimensional materials for silicon light emitting devices.</i>
13.45 - 14.05	Enaldiev V.V. <i>Atomic reconstruction in twisted bilayers of transition metal dichalcogenides.</i>
14.05 - 14.20	Dezhkina M.A. <i>Blister-based laser-induced forward transfer of 1D and 2D carbon nanomaterials.</i>
14.20 - 14.40	Brambilla A. <i>Templating effects of Graphene in stabilizing ultrathin compounds on Ni(111).</i>
<b>14.40 - 15.10</b>	<b>Online Poster Session</b>
<b>15.10 - 16.15</b>	<b>Recent Advances in Fabrication and Analyses Methods</b>
15.10 - 15.30	Kalashnikova A. <i>Picosecond acoustics in nanostructures with phase transitions.</i>
15.30 - 15.45	Milanich A.I. <i>Investigation of 3D stereogram's errors.</i>
15.45 - 16.00	Karlagina Yu. <i>Lacunar-ring structure as a single element of a titanium implant surface.</i>
16.00 - 16.15	Ermatov T. <i>Layer-by-layer deposition technique for the functionalization of microstructured optical fibers.</i>
<b>16.15 - 16.45</b>	<b>Online Poster Session</b>

<b>28th of April</b>	
<b>13.00 - 13.45</b>	<b>Plenary Session</b>
13.00 - 13.45	Rasing T. <i>All-optical control of spins: from fundamentals to brain-inspired computing.</i>
<b>13.45 - 15.25</b>	<b>Photonic and Optoelectronic Materials</b>
13.45 - 14.05	Vewinger F. <i>Photon Condensates in Microstructured Trapping Potentials.</i>
14.05 - 14.25	Bollani M. <i>Nano-fabrication and applications of Si nanocrystals patterns via templated dewetting.</i>
14.25 - 14.45	De Angelis C. <i>Harmonic generation and reconfigurable</i>
14.45 - 15.05	Puentes G. <i>Spin Hall Effect in Photonic Materials.</i>
15.05 - 15.25	Huttunen M. <i>Collective and non-local effects in nonlinear metasurfaces.</i>
<b>15.25 - 15.55</b>	<b>Online Poster Session</b>
<b>15.55 - 18.15</b>	<b>THz Symposium - Nonlinear and High Field</b>
15.55 - 16.15	Koulouklidis A.D. <i>Generation of Intense THz Pulses With High Efficiency From Mid-Infrared Two-Color Laser Filaments.</i>
16.15 - 16.35	Totero Gongora J.S. <i>Two-colour Surface Optical Rectification.</i>
16.35 - 16.55	Oladyshkin I. V. <i>Interaction of femtosecond laser pulses with metals: nonlinear heating, ablation and terahertz response.</i>
16.55 - 17.10	Arkhipov R.M. <i>Generation of sub cycle terahertz pulses via coherent control of nonlinear medium by femtosecond pulses.</i>
17.10 - 17.25	Liu X. <i>Generation of a gigahertz pulse sequence using two interference terahertz pulses.</i>
17.25 - 17.40	Sheglov P.A. <i>Strong terahertz pulses generation by TW laser filamentation in low pressure nitrogen.</i>
17.40 - 17.55	Zhukova M.O. <i>Nonlinear refractive index estimation of electro-optical crystals and liquids used for detection and generation of THz radiation.</i>

29th of April	
12.30 - 13.15	<b>Plenary Session</b>
12.30 - 13.15	Pavesi L. <i>Neuromorphic photonics as a route to hybrid artificial intelligence.</i>
13.15 - 15.20	<b>Photonic and Optoelectronic Materials</b>
13.15 - 13.45	Pavel Ginzburg, TBA
13.45 - 14.05	Raziman T.V. <i>Exciton diffusion and annihilation in nanophotonic landscapes.</i>
14.05-14.25	Olekhno N.A. <i>Optical spin momentum locking of entangled surface plasmon-polaritons generated with a nonlinear nanoparticle.</i>
14.25 - 14.40	Pavlov V.V. Linear and nonlinear magneto-optical phenomena in europium chalcogenides EuX (X = O, S, Se, Te)
14.40 - 15.00	Feofanov A.V. <i>Study of anticancer drugs affecting nucleosomal structure using spFRET approach</i>
15.00 - 15.20	Orad Reshef, <i>Direct Observation of Phase-Free Propagation in a Silicon Waveguide</i>
15.20 - 15.50	<b>Online Poster Session</b>
15.50 - 17.10	<b>THz Symposium - Imaging</b>
15.50 - 16.10	Peccianti M. <i>Terahertz Hyperspectral Nonlinear Ghost Imaging.</i>
16.10 - 16.30	Antonov V.N. <i>Detection of black body radiation using a compact terahertz imager.</i>
16.30 - 16.50	Zaytsev K.I. <i>THz imaging of soft biological tissues with spatial resolution beyond the Abbe limit.</i>
16.50 - 17.10	Gorodetsky A. <i>Imaging with commercial THz-TDS system.</i>
17.10 - 17.40	<b>Online Poster Session</b>
17.40 - 18.55	<b>THz Symposium - Spectroscopy, Metamaterials and Devices</b>
17.40 - 18.00	Nazarov M.M. <i>THz spectroscopy of biological solutions: conventional approaches and waveguide sensors.</i>
18.00 - 18.20	Markmann S. <i>2D-THz-Spectroscopy on a Quantum Cascade Structure.</i>
18.20 - 18.40	Degl'Innocenti R. <i>Active metamaterial polarization modulators for the Terahertz frequency range.</i>
18.40 - 18.55	Michailow W. <i>Direct Detection of Terahertz Radiation in a Dual-Gated GaAs-AlGaAs Two-Dimensional Electron Gas.</i>
18.55 - 19.10	Boytsova O.V. <i>Self-organized vanadium dioxide 2D and 3D structures with metal-insulator transition and THz transmission switch properties.</i>

<b>30th of April</b>	
<b>13.30 - 14.40</b>	<b>Microscopy and Microspectroscopy</b>
13.30 - 13.50	Dergachev A. TESCAN
13.50 - 14.05	Khnykina K.A. <i>Surface-enhanced raman spectroscopy study of self-assembled plasmonic films using the streamline optical system.</i>
14.05 - 14.20	Ibragimov A.R. <i>Neural Network Module for tuning an AFM in the study of photonic crystal films</i>
14.20 - 14.40	Stanislav Leesment, NT-MDT
<b>14.40 - 15.10</b>	<b>Online Poster Session</b>
<b>15.10 - 16.15</b>	<b>Smart Nanomaterials</b>
15.10 - 15.30	Reznik R.R. <i>Hybrid III-V nanowires on silicon: growth and properties.</i>
15.30 - 15.45	Kudo A. <i>Design and Fabrication of a Microfluidic Slit Channel</i>
15.45 - 16.00	Mozer K.V. <i>The formation of a sensitive structure of a contact lens sensor</i>
16.00 - 16.15	Obreshkov B. <i>Blueshifts of high-order harmonic generation in crystalline silicon subjected to intense femtosecond near-infrared laser pulses.</i>
16.15 - 16.30	Mastiukova A.S. <i>Error suppression and entropic asymmetry in finite-dimensional quantum systems.</i>
<b>16.30 - 17.15</b>	<b>Plenary Session</b>
16.30 - 17.15	Gummenik A. <i>Material Processing for Smart Fibers.</i>
<b>17.15 - 17.30</b>	<b>Closing Remarks</b>