September 8 (Wednesday)

Hall A

Section 1.



Fundamental processes in lowtemperature plasma: low and high pressure discharges, near-electrode phenomena, radiation, ultrafast processes, diagnostics.

9.00-10.10 Oral Session (OS-1-3). Chairman: Alexandr I. Lipchak

1	Invited report 9.00-9.30	Nanosecond breakdown in a pulsed open discharge Pavel P. Gugin, P. Bokhan, D.E. Zakrevsky, N.A. Glubokov Institute of Semiconductor Physics SB RAS, Novosibirsk, Russia	
2	Oral 9.30- 9.50	Runaway of electrons and initiation of explosive electron emission during pulse breakdown of dense gases G.A. Mesyats, Nikolay M. Zubarev Institute of Electrophysics UB RAS, Ekaterinburg, Russia	
3	Oral 9.50- 10.10 A source of powerful subnanosecond VUV-UV radiation pulses based on a high-pressure gas discharge V.I. Baryshnikov, Viktor L. Paperny Irkutsk State University, Irkutsk, Russia		

Hall A

Section 4.



Sources of low-temperature plasma:

generators of continuous, pulse-periodic and pulsed action, gas switches, power supply.

10.30-12.00	Oral Session (OS-4-3).	Chairman: Mikhail M. Tsventoukh
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1	Invited report 10.30-11.00	Cold plasma source based on the apokampic discharge in atmospheric-pressure air <u>Dmitry A. Sorokin</u> , V.A. Panarin, E.A. Sosnin, V.S. Kuznetsov, V.S. Skakun Institute of High Current Electronics SB RAS, Tomsk, Russia	
2	Oral 11.00- 11.20	Wide radiation bands of sub-nanosecond discharge in xenon and inaccuracies in their measurements <u>Victor F. Tarasenko</u> , A.N. Panchenko, D.V. Beloplotov, D.A. Sorokin, M.I. Lomaev, V.V. Kozevnikov Institute of High-Current Electronics SB RAS, Tomsk, Russia	
3	Oral 11.20- 11.40	Methods for increasing the electrical breakdown strength of the accelerating gap in an electron source with a plasma cathode Pavel V. Moskvin , V.N. Devyatkov, I.V. Lopatin, V.I. Shin Institute of High Current Electronics SB RAS, Tomsk, Russia	
4 oral discharge		Sergey S. Kovalsky, V.V. Denisov, E.V. Ostroverkhov, V.E. Prokop'ev	

Hall B

Section 2.



Gas-discharge methods for surface modification and coating deposition: surface modification, ion implantation, combined methods of surface treatment.

1	Application of composite SHS-cathodes in recent PVD technologies for manufacturing of protective UHTC-based coatings 9.00- 9.30 Philipp Kiryukhantsev-Korneev, E. Levashov National University of Science and Technology "MISIS", Moscow, Russia		
2	Oral 9.30- 9.50	Deposition of Al ₂ O ₃ coatings in Ar-O ₂ low-pressure discharge plasma under a high dissociation digree of O ₂ P.V. Tretnikov, N.V. Gavrilov, <u>Alexandr S. Kamenetskikh</u> , S.V. Krivoshapko, A.V. Chukin Institute of Electrophysics UB RAS, Ekaterinburg, Russia	
Oral 9.50-10.10 Structural and phase dependencies of coatings formation based on intermetallides Ti-Al systems for increasing the durability of cutting too Eduard L. Vardanyan, K.N. Ramazanov, A.Yu. Nazaraov, R.Sh. Nagimov, A.Maslov		intermetallides Ti-Al systems for increasing the durability of cutting tools <u>Eduard L. Vardanyan</u> , K.N. Ramazanov, A.Yu. Nazaraov, R.Sh. Nagimov, A.A.	

Hall B

Section 3.



Plasma-chemical, electrophysical and laser technologies: environmental applications, production of nanopowders and functional materials.

10.30-12.00	Oral Session (OS-3-3).	Chairman: Egor V. Tikhonov
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1	Invited report 10.30-11.05	Features of the gas-phase synthesis of oxide nanopowders using high-power lasers V. V. Osipov, V. V. Lisenkov, <u>Vyacheslav V. Platonov</u> , E. V. Tikhonov Institute of Electrophysics UB RAS, Ekaterinburg, Russia	
2	Oral 11.05- 11.30	Impulse laser application for surface modification of tool steel with B ₄ C-Al powders <u>Undrakh L. Mishigdorzhiyn</u> , N.S. Ulakhanov, A.V. Nomoev Institute of Physical Materials Science SB RAS, Ulan-Ude, Russia	
Oral 11.30- 11.55 Droplets generation conducting during laser-plasma treating of metals in electric field Alexey Yu. Ivanov, A.L. Sitkevich, S.V. Vasiliev Grodno State University named after Yanka Kupala, Grodno, Belarus			

Poster Session



September 8 (Wednesday) - IEP

Section 1.

Fundamental processes in low-temperature plasma: low and high pressure discharges, near-electrode phenomena, radiation, ultrafast processes, diagnostics.

14.00-15.30 Poster Session (P-1). Chairman: *Dmitry L. Shmelev*

Section 4.

Sources of low-temperature plasma: generators of continuous, pulse-periodic and pulsed action, gas switches, power supply.

14.00-15.30 Poster Session (P-4). Chairman: Dmitry L. Shmelev

Section 2.

Gas-discharge methods for surface modification and coating deposition: surface modification, ion implantation, combined methods of surface treatment.

15.30-17.00	Poster Session (P-2).	Chairman: <i>Dmitry L. Shmelev</i>
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Section 3.

Plasma-chemical, electrophysical and laser technologies: environmental applications, production of nanopowders and functional materials.

15.30-17.00	Poster Session (P-3).	Chairman: Dmitry L. Shmelev
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