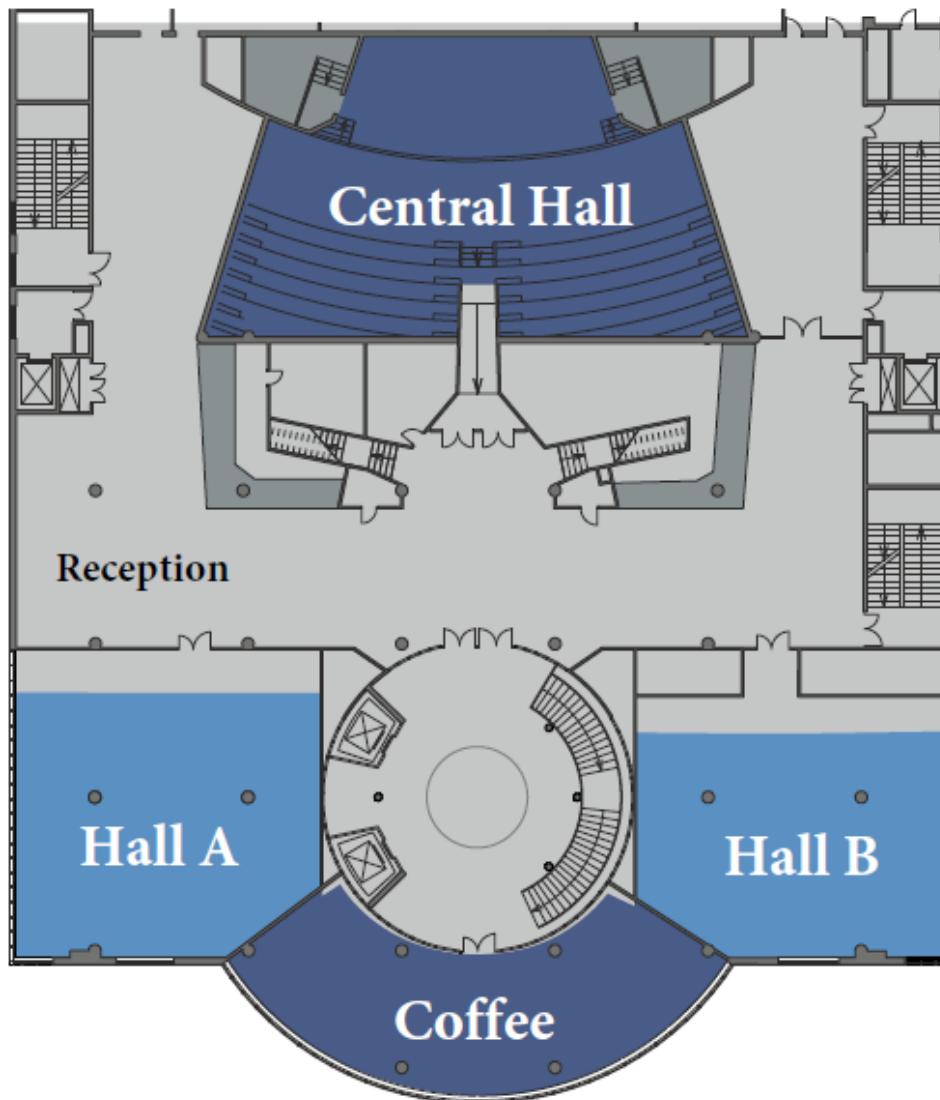


Scientific program

The official languages of the Conference are English and Russian



September 8 (Monday)

Panorama, Central Hall

Plenary Session

Plenary Lecture 09:30-10:15	High Voltage Setups for Runaway Electron Beam Generation in the Institute of Electrophysics UB RAS S.A. Shunailov Institute of Electrophysics UB RAS, Ekaterinburg, Russia
Plenary Lecture 10:35-11:20	Pulsed Discharges in Aerospace Applications A. Starikovskiy Princeton University, Princeton, USA
Invited Lecture 11:20-12:05	Discharge-Emission Systems under Extreme Operating Conditions and their Application for Modification of Materials E.M. Oks Tomsk State University of Control Systems and Radioelectronics, Tomsk, Russia Institute of High Current Electronics SB RAS, Tomsk, Russia

September 8 (Monday)**Panorama, Hall A**

Section 1. Oral Session 1 (OS-1-1)
14.00-16.10

1	Invited report	Methods of triggering for pseudospark switch with the trigger unit based on an auxiliary glow discharge <i>N.V. Landl, Y.D. Korolev, O.B. Frants, A.V. Bolotov, V.O. Nekhoroshev</i> Institute of High Current Electronics SB RAS, Tomsk, Russia
2	Invited report	Generation and analysis of unipolar arcs on W fuzz initiated under helium ion bombardment from RF plasma <i>A.V. Kaziev, G.I. Dobrovolskiy, D.V. Kolodko, K.V. Smirnova A.V. Tumarkin, M.M. Kharkov, M.M. Tsventoukh</i> National Research Nuclear University, Moscow, Russia
3	Oral	Avalanches of nanoplasmas formation via electrical explosions of helium-filled tungsten nanowires <i>M.M. Tsventoukh</i> Lebedev Physical Institute of Russian Academy of Sciences, Moscow, Russia
4	Oral	Dynamics and structures of an active coulomb particles in gas-discharge plasma <i>M.M. Vasiliev, R.A. Syrovatka, E.A. Kononov, R.V. Senoshenko, O.F. Petrov</i> Joint Institute for High Temperatures of the Russian Academy of Sciences, Moscow, Russia
5	Oral	Characterization of normal glow discharge at atmospheric pressure depending on different cathode shapes <i>L.V. Simonchik, A.V. Kazak, P.A. Ivanova, I. Rafatov, M.U. Tomkavich</i> Institute of Physics of National Academy of Sciences of Belarus, Minsk, Belarus
6	Oral	Branching characteristics of 3m long air gap streamer discharge under positive lightning impulse voltage <i>Ding Yujian</i> Beijing Jiaotong University, BEIJING, China

Panorama, Hall B

Section 2. Oral Session 1 (OS-2-1)
14.00-16.10

1	Invited report	Structure of high-entropy copper-alloyed TiNbZrTaHf alloy <i>N.N. Koval, N.A. Prokopenko, E.A. Petrikova, Yu.F. Ivanov, V.V. Shugurov, Yu.Kh. Akhmadev, O.S. Tolkachev</i> Institute of High Current Electronics SB RAS, Tomsk, Russia
2	Invited report	Modification of tungsten surface properties by exposure to high-energy compression plasma flow <i>V.M. Astashynski, N.B. Bazylev, G.M. Dzagnidze, A.M. Kuzmitski, P.N. Shoronov</i> A.V. Luikov Heat and Mass Transfer Institute National Academy of Sciences of Belarus, Minsk, Belarus
3	Oral	Multiphase multilayered PVD coatings based on refractory elements <i>O.V. Krygina, Yu.F. Ivanov, N.A. Prokopenko, E.A. Petrikova, O.S. Tolkachev</i> Institute of High Current Electronics SB RAS, Tomsk, Russia
4	Oral	The effect of nanolayer thickness on physical and mechanical properties and structural phase composition of TiAl (N, C, O) coating <i>A.Yu. Nazarov, A.A. Tulina, K.N. Ramazanov, V.R. Muhamadeev, E.R. Kasimova</i> Ufa University Of Science and Technology, Ufa, Russia
5	Oral	Identification and analysis of hypereutectic composition silumin physical plasticization regularities by the complex electron-ion-plasma method <i>E.A. Petrikova, Yu.F. Ivanov, A.D. Teresov, N.A. Prokopenko, S.Yu. Doroshkevich</i> Institute of High Current Electronics SB RAS, Tomsk, Russia
6	Oral	Behaviour of high-entropy NbTaMoW alloy in low-temperature plasma <i>N.I. Ilinykh, S.A. Ilinykh, I.A. Malkova, B.R. Gelchinski, A.A. Rempel</i> Vatolin Institute of Metallurgy of the Ural Branch of the Russian Academy of Sciences, Ekaterinburg, Russia

September 8 (Monday)**Panorama, Hall A**

Section 4. Oral Session 1 (OS-4-1)
16.30-18.00

1	Invited report	Acceleration of the picosecond runaway electron bunch in the cascade regime at atmospheric pressure air <i>L.N. Lobanov, G.A. Mesyats, A.G. Sadykova, K.A. Sharypov, V.G. Shpak, S.A. Shunailov, M.I. Yalandin, N.M. Zubarev</i> Institute of Electrophysics UB RAS, Ekaterinburg, Russia
2	Oral	Development and tests 1-MA, 40-kV air insulated linear transformer driver stage <i>A.A. Zherlitsyn, E.V. Kumpyak, A.D. Lenskiy, A.V. Pavlenko, A.N. Grigoriev</i> Institute of High Current Electronics SB RAS, Tomsk, Russia
3	Oral	Subnanosecond, megavolt-range vacuum diodes: the state of the art <i>V.E. Patrakov, L.N. Lobanov, M.S. Pedos, S.N. Rukin, K.A. Sharypov, S.A. Shunailov, S.P. Timoshenkov, M.I. Yalandin</i> Institute of Electrophysics UB RAS, Ekaterinburg, Russia
4	Oral	Pulsed X-ray tubes in metal-ceramic design <i>D.S. Makhanko, B.A. Kozlov</i> JSC Research Institute of Gas- Discharge Devices Plasma, Ryazan, Russia

Panorama, Hall B

Section 3. Oral Session 1 (OS-3-1)
16.30-18.00

1	Invited report	Formal-kinetic modeling of air cleaning in a closed plasma-chemical reactor with a pulsed corona discharge <i>I.E. Filatov, D.L. Kuznetsov</i> Institute of Electrophysics UB RAS, Ekaterinburg, Russia
2	Oral	Study of the antibacterial properties of zinc oxide nanopowder suspensions and composites based thereon to mycobacterium tuberculosis <i>M.L.Kokorina, D.V.Belyaev, D.V.Vahrusheva, D.V.Dianov, S.Yu. Sokovnin</i> «Urals State Medical University» of the Ministry of Healthcare of the Russian Federation, Ekaterinburg, Russia
3	Oral	Combined treatment with cold atmospheric plasma jet and gold nanoparticles with TYRP1 antibodies successfully suppress tumor growth in vivo <i>I. Schweigert, M. Biryukov, A. Polyakova, N. Krychkova, O. Koval, E. Gorbunova, D. Zakrevsky, E. Milakhina, P. Gugin</i> Khristianovich Institute of Theoretical and Applied Mechanics, Novosibirsk, Russia
4	Oral	Antitumor, antibacterial and antiviral treatment methods using a low-temperature plasma source based on a piezotransformer <i>E.M. Konchekov, N.G. Gusein-Zade, L.V. Kolik, T.I. Pavlik, D.V. Malakhov, D.A. Serov, D.E. Burmistrov, V.V. Gudkova, E.I. Grudiev, N.N. Bogachev, S.V. Gudkov</i> Prokhorov General Physics Institute of the Russian Academy of Sciences, Moscow, Russia

September 9 (Tuesday)



Panorama, Central Hall

Plenary Session

Plenary Lecture 09:00-09:45	Plasma Methods for Controlling Aerodynamic Flows V.A. Yamshchikov Institute for Electrophysics and Electric Power RAS, Saint Petersburg, Russia
Plenary Lecture 09:45-10:30	Gas Discharge Plasma for Surface Modification of Insulating Materials Cheng Zhang Institute of Electrical Engineering CAS, Beijing, China University of Chinese Academy of Sciences, Beijing, China
Plenary Lecture 10:45-11:30	Active Brownian Motion of Charged Grains in Plasma, Viscous Fluid, and Superfluid Helium O.F. Petrov Joint Institute for High Temperatures RAS, Moscow, Russia
Plenary Lecture 11:30-12:15	Physical Models of Compact Sources of Neutrons and Charged Particles under the Action of Lasers and Pulsed Jets S.V. Ryzhkov Bauman Moscow State Technical University, Moscow, Russia

September 9 (Tuesday)**Panorama, Hall A**

Section 1. Oral Session 2 (OS-1-2)
13.30-15.40

1	Invited report	Comparison of plasma parameters of plasma diffuse jets and red columnar sprites <u>V.F. Tarasenko, E.Kh. Baksht, D.A. Sorokin, V.P. Vinogradov</u> Institute of High Current Electronics SB RAS, Tomsk, Russia
2	Invited report	Surface ionization waves in a coaxial barrier discharge in argon flow at atmospheric pressure <u>Yu.S. Akishev, S.A. Ermolaeva, M.A. Medvedev, A.V. Petryakov</u> SRC RF TRINITI, Moscow, Russia
3	Oral	On "memory" of plasma structures formed in a coaxial barrier discharge in argon flow <u>A.V. Petryakov, Yu.S. Akishev, S.A. Ermolaeva, M.A. Medvedev</u> SRC RF TRINITI, Moscow, Russia
4	Oral	Influence of plasma bubble process on hydrogen production characteristics in methanol-water mixtures <u>Y. Xin, Sh. Lei, J. Liu, Q. Wang, B. Sun</u> Dalian Maritime University, Dalian, China
5	Oral	Computation of high electron density during nanosecond pulsed plasma synthetic jet discharge initiation: coupled numerical models <u>Z. Jintao, Cheng Zhang, Xinyu Xu, Bangdou Huang, Tao Shao</u> Institute of Electrical Engineering, Chinese Academy of Sciences, Beijing, China
6	Oral	Electrophysical parameters of the "physically pure" abnormal discharge in inert gases <u>G.V. Shevchenko, P.A. Bokhan, P.P. Gugin, M.A. Lavrukhin, D.E. Zakrevsky</u> Rzhanov Institute of Semiconductor Physics, Novosibirsk, Russia

Panorama, Hall B

Section 2. Oral Session 2 (OS-2-2)
13.30-15.40

1	Invited report	Extension the operating range of continuous magnetron discharge with a cold cathode in self-sputtering mode <u>M.V. Shandrikov, A.A. Cherkasov, E.M. Oks</u> Institute of High Current Electronics SB RAS, Tomsk, Russia
2	Invited report	Application of HiPIMS technology for deposition of functional nanocomposite coatings using ceramic SHS-targets <u>Ph.V. Kiryukhantsev-Korneev, A.D. Chertova, E.A. Levashov</u> The National University of Science and Technology MISIS, Moscow, Russia
3	Oral	Magnetron discharge with asymmetric rotating magnetic field <u>A.V. Tumarkin, A.V. Kaziev, M.M. Kharkov, D.V. Kolodko, Y.D. Kiryukhin</u> National Research Nuclear University, Moscow, Russia
4	Oral	Analysis of the ion flux extracted from a DC magnetron discharge with aluminum target <u>N.V. Mamedov, D.V. Kolodko, G.S. Lomonosov, A.V. Tumarkin, M.M. Kharkov, M.S. Novikov, A.V. Kaziev</u> Research Institute for Precision Machine Manufacturing (NIITM JSC), Moscow, Russia
5	Oral	Formation of gas and metal ion beams in a source based on a high-current pulsed magnetron discharge <u>A.A. Cherkasov, E.M. Oks, K.P. Savkin, M.V. Shandrikov</u> Institute of High Current Electronics SB RAS, Tomsk, Russia
6	Oral	Molecular mobility in the near-surface nanolayers of nascent and sintered UHMWPE reactor powders as revealed by plasma-induced thermoluminescence <u>T.D. Shidlovskiy, L.P. Myasnikova, V.I. Siklitsky, V.L. Preobrazhenskii, M.M. Cygankov, A.S. Luzgin</u> The Ioffe Physical-Technical Institute of the Russian Academy of Sciences, St. Petersburg, Russia

September 9 (Tuesday)**Panorama, Hall A**

Section 4. Oral Session 2 (OS-4-2)

15.55-18.00

1	Invited report	Degradation in e-beam irradiated solutions of medicine <i>O.N. Tchaikovskaya, E.N. Bocharnikova, N.P. Beziepkina, I.E. Filatov, V.I. Solomonov, A.V. Spirina, A.I. Lipchak, A.S. Makarova</i> Institute of Electrophysics UB RAS, Ekaterinburg, Russia
2	Oral	Radiolytic transformation of toxicants in the presence of humic acids <i>A.V. Spirina, O.N. Tchaikovskaya, V.I. Solomonov, N.V. Udina</i> Institute of Electrophysics UB RAS, Ekaterinburg, Russia
3	Invited report	A new concept: multi-switch shared driving <i>J. Rao</i> Chinese Academy of Sciences, Suzhou Institute of Biomedical Engineering Technology, Suzhou, China
4	Oral	Features of measuring the diameter of a focused electron beam in a forevacuum <i>A.A. Zenin, I.Yu. Bakeev, A.V. Dolgova, A.S. Klimov</i> Tomsk State University of Control Systems and Radioelectronics, Tomsk, Russia, Tomsk, Russia

Panorama, Hall B

Section 3. Oral Session 2 (OS-3-2)

15.55-18.00

1	Invited report	Characteristic evolution of pulsed spark discharge and its application in energy small molecules conversion <i>S. Zhang, L. Li, C. Zhang, T. Shao</i> The Institute of Electrical Engineering of Chinese Academy of Sciences, Beijing, China
2	Oral	Corona discharge ozone generator <i>A.S. Chepusov, S.R. Korzhenevskiy, A.A. Komarskiy, A.V. Ponomarev, O.D. Krasniy</i> Institute of Electrophysics UB RAS, Ekaterinburg, Russia
3	Oral	Filamentation and optical breakdown of air <i>V.E. Prokopev, V.K. Oshlakov</i> Institute of High Current Electronics SB RAS, Tomsk, Russia
4	Oral	Generators for electric pulse crushing with operating voltage of 50 kV <i>V.M. Alexeenko, A.A. Zherlitsyn, S.S. Kondratiev, A.G. Sitnikov</i> Institute of High Current Electronics SB RAS, Tomsk, Russia
5	Oral	Combined fieldshaper of steel base with CuNb wire insert <i>V.I. Krutikov, A.V. Spirin, E.V. Zaytsev, S.N. Parandin</i> Institute of Electrophysics UB RAS, Ekaterinburg, Russia

September 10 (Wednesday)**Panorama, Hall A**

Section 1. Oral Session 3 (OS-1-3)

09.00-10.30

1	Invited report	Breakdown mechanisms matching in the composite plasma switcher <i>P.P. Gugin, P.A. Bokhan, M.A. Lavrukhin, D.E. Zakrevsky</i> Rzhanov Institute of Semiconductor Physics Siberian Branch of Russian Academy of Sciences, Novosibirsk, Russia
2	Oral	Investigation of subnanosecond breakdown in slit discharge <i>M.A. Lavrukhin, P.A. Bokhan, P.P. Gugin, G.V. Shevchenko, D.E. Zakrevsky</i> Rzhanov Institute of Semiconductor Physics Siberian Branch of Russian Academy of Sciences, Novosibirsk, Russia
3	Oral	High voltage subnanosecond switching scenario in plasma device electron combing open and capillary discharges <i>I. Schweigert, P. Bokhan, P. Gugin, M. Lavrukhin, D. Zakrevsky</i> Khristianovich Institute of Theoretical and Applied Mechanics, Russia
4	Oral	Metal particles in atmospheric pressure glow discharge plasma: generation, formation of flows, optical emission <i>K.P. Savkin, D.A. Sorokin, D.V. Beloplotov, A.G. Nikolaev, M.V. Shandrikov, A.A. Cherkasov</i> Institute of High Current Electronics SB RAS, Tomsk, Russia

Panorama, Hall B

Section 2. Oral Session 3 (OS-2-3)

09.00-10.30

1	Invited report	About the results of the project «In situ methods of synchrotron studies of multilayer functional structures with unique parameters and properties created by beam-plasma surface engineering» <i>V.V. Denisov, A.D. Teresov, N.N. Koval, N.A. Ratakhin, A.N. Schmakov, A.A. Leonov, S.S. Kovalsky, Yu.A. Denisova, E.V. Ostroverkhov, D.Yu. Ignatov, M.V. Savchuk, M.S. Syrtanov, M.V. Andreev</i> Institute of High Current Electronics SB RAS, Tomsk, Russia
2	Oral	In-situ synchrotron X-ray diffraction study of phase evolution in Fe-Cr-Al-Zr surface alloy <i>E.V. Yakovlev, E.A. Pesterev, A.V. Schneyder, A.B. Markov</i> Tomsk Scientific Center of the Siberian Branch of the Russian Academy of Sciences, Tomsk, Russia
3	Oral	Beam-plasma modification of structural materials in the forevacuum pressure region <i>A.V. Tyunkov</i> Tomsk State University of Control Systems and Radioelectronics, Tomsk, Russia
4	Oral	Electron beam and ion-plasma modification of surface roughness of YSZ coatings deposited by fore-vacuum plasma-cathode electron source <i>D.B. Zolotukhin, A.A. Andronov, A.V. Kazakov, A.V. Tyunkov, Yu.G. Yushkov</i> Tomsk State University of Control Systems and Radioelectronics, Tomsk, Russia
5	Oral	Electron beam synthesis of thermal protective ceramic coatings based on zirconium dioxide in the forevacuum pressure range <i>A.A. Andronov, D.B. Zolotukhin, A.V. Tyunkov, Yu.G. Yushkov</i> Tomsk State University of Control Systems and Radioelectronics, Tomsk, Russia

September 10 (Wednesday)

Panorama, Hall A

Section 4. Oral Session 3 (OS-4-3)
10.45-12.15

1	Invited report	Radiation magnetic gas dynamics simulation of plasma jets <u>O. G. Olkhovskaya</u> Keldysh Institute of Applied Mathematics of Russian Academy of Sciences , Moscow, Russia
2	Oral	On the modeling of plasma jet dynamics in laboratory experiments with a pulsed source <u>V.A. Gasilov, N.O. Savenko, E.M. Urvachev, A.S. Grushin, T.V. Loseva, Yu.V. Poklad</u> Institute of Applied Mathematics RAS, Moscow, Russia
3	Oral	Optimization of the high energy switches for synchronization of multiple plasma focus devices <u>K. Arshad, U. Sarwar, Aman-Ur-Rehman</u> Pakistan Institute of Engineering and Applied Science, Islamabad, Pakistan
4	Oral	Source of powerful nanosecond radiation pulses of a wide spectral range based on a high-current volume discharge in xenon <u>V.L. Paperny, V.I. Baryshnikov</u> Irkutsk State University, Irkutsk, Russia

Panorama, Hall B

Section 3. Oral Session 3 (OS-3-3)
10.45-12.15

1	Invited report	Plasma dynamic synthesis optimization for enhancing the process productivity <u>I.I. Shanenkov, A.A. Sivkov, I.S. Zhumabaev, A.I. Tsimmerman</u> National Research Tomsk Polytechnic University, Tomsk, Russia
2	Oral	High-entropy boride synthesis by vacuum-free arc discharge plasma <u>Y.Z. Vassilyeva, A.Y. Pak, Z.S. Bolatova, Y.A. Neklya, A.A. Svinukhova</u> Tomsk Polytechnic University, Tomsk, Russia
3	Oral	Influence of key parameters of plasma-chemical synthesis on the properties of W-C-Co system nanopowders <u>A.G. Astashov, A.V. Samokhin, D.V. Fisunov, Yu.P. Kalashnikov, A.V. Terent'ev, N.V. Alekseev, I.S. Litvinova</u> A. A. Baykov Institute of Metallurgy and Materials Science RAS, Moscow, Russian Federation, Moscow, Russia
4	Oral	Plasma arc reactor for synthesis of lanthanum hexaboride <u>A.A. Svinukhova, A.V. Spodina</u> School of Power Ingeneering, Tomsk, Russia

Institute of Electrophysics

Sections 1-4. Poster Session
14.00-17.00

Information is located at the bottom of the scientific program.

September 11 (Thursday)**Panorama, Hall A**

Section 1. Oral Session 4 (OS-1-4)

09.00-10.30

1	Invited report	Features of high-voltage nanosecond discharge in gaps with highly inhomogeneous distribution of electric field filled with dense media <i>D.A. Sorokin, D.V. Beloplotov, B. Zaytsev</i> Institute of High Current Electronics SB RAS, Tomsk, Russia
2	Oral	The systems based on high-current non-self-sustained low-pressure glow discharge with a hollow cathode for generation of beam-plasma formations <i>V.V. Denisov, T.V. Koval, N.N. Koval, E.V. Ostroverkhov, M.V. Savchuk, S.S. Kovalsky, V.V. Yakovlev, A.O. Egrov</i> Institute of High Current Electronics SB RAS, Tomsk, Russia
3	Oral	Operation features of a planar magnetron discharge forming emission plasma in a pulsed forevacuum plasma-cathode electron-beam source <i>A.V. Kazakov, V.E. Arkatov, Y.A. Burachevsky, E.M. Oks, N.A. Panchenko</i> Tomsk State University of Control Systems and Radioelectronics, Tomsk, Russia
4	Oral	Utilizing ionization region model to interpret the ion flux measurement results in HiPIMS plasma with a tungsten target <i>G.S. Lomonosov, D.V. Kolodko, A.V. Tumarkin, M.M. Kharkov, A.V. Kaziev</i> National Research Nuclear University, Moscow, Russia

Panorama, Hall B

Section 2. Oral Session 4 (OS-2-4)

09.00-10.30

1	Invited report	Surface finishing of 17-4PH steel components for biomedical applications made by binder jetting. A comparison between mass finishing and vacuum plasma techniques <i>M. Bestetti, A.L. Huspek, M. Pozzi, M. Mariani, N. Lecis</i> Politecnico di Milano Tomsk Polytechnic University, Milano, Italy
2	Oral	Plasma modification of the polytetrafluoroethylene surface for medical purpose <i>O.A. Laput, A.G. Korzhova, Y.H. Akhmadeev, I.A. Kurzina</i> National Research Tomsk State University, Tomsk, Russia
3	Oral	Effect of glow discharge nitrogen plasma on the physico-chemical properties of the PCL-based 3D-scaffolds surface <i>U.V. Khomutova, O.A. Laput, D.A. Zuza, I.A. Kurzina</i> Institute of High Current Electronics SB RAS, Tomsk, Russia
4	Oral	Improving hybrid perovskites stability for solar cells application in space by using molecular modifiers <i>I.S. Zhidkov, V.V. Ozerova, M.N. Saruchev, L.A. Frolova, E.Z. Kurmaev, A.I. Kukharenko, P.A. Troshin</i> Ural Federal University, Ekaterinburg, Russia
5	Oral	Investigation of rotating DBD plasma treatment for improved surface properties in EP/AlN composites <i>Fu Yongqiang, Yu Guanglin, Li Jie, Jiang Nan</i> Dalian University of Technology, Dalian, China

September 11 (Thursday)

Panorama, Hall A

Section 1. Oral Session 5 (OS-1-5)

10.45-12.15

1	Invited report	Diagnostics of the process of plasma mass separation in configuration with potential well <u>R.A. Usmanov</u> , A.V. Gavrikov, N.N. Antonov, A.P. Oiler, R.A. Timirkhanov, V.P. Smirnov Joint Institute for High Temperatures RAS, Moscow, Russia
2	Oral	Establishment of stationary diffuse mode in vacuum arc discharge <u>M. S. Paramonov</u> , A. D. Melnikov, A. I. Belostotsky, R. A. Usmanov, N. N. Antonov, A. V. Gavrikov Joint Institute for High Temperatures RAS, Moscow, Russia
3	Oral	Diffuse vacuum arc on nonthermionic chromium cathode in axial magnetic field <u>A.I. Belostotskij</u> , A.D. Melnikov, M.S. Paramonov, R.A. Usmanov, N.N. Antonov, A.V. Gavrikov, V.P. Smirnov Joint Institute for High Temperatures RAS, Moscow, Russia
4	Oral	Influence of axial and radial plasma density distributions on the characteristics of a plasma antenna <u>V.P. Stepin</u> , V.I. Zhukov, S.E. Andreev, N.N. Bogachev Prokhorov General Physics Institute of the Russian Academy of Sciences, Moscow, Russia

Panorama, Hall B

Section 3. Oral Session 4 (OS-3-4)

10.45-12.15

1	Invited report	Features of a non-equilibrium atmospheric pressure discharge sustained by continuous sub-terahertz radiation <u>S.V. Sintsov</u> , A.V. Vodopyanov, A.P. Veselov, A.V. Sidorov, E.I. Preobrazhenskiy, A.P. Fokin, D.A. Sergeev, I.M. Kraev, A.A. Murzanev, M.Y. Glyavin Federal Research Center A.V. Gaponov-Grekhov Institute of Applied Physics of the Russian Academy of Sciences, Nizhny Novgorod, Russia
2	Oral	Laser pulsed impact on β-Ga₂O₃ ceramics samples <u>N.L. Aluker</u> , B.P. Aduiev, A.Yu. Mitrofanov, A.E. Muslimov The Federal Research Center of Coal and Coal-Chemistry of Siberian Branch of the Russian Academy of Sciences, Kemerovo, Russia
3	Oral	Ribbon electron beam for generation of beam plasma and beam-plasma treatment of polymers in the pressure range of 0.1-10 Pa <u>A.S. Klimov</u> , J.E. Dagri, A.V. Dolgova, A.A.Zenin, E.M. Oks Tomsk state university of control systems and radioelectronics, Tomsk, Russia
4	Oral	Dynamics of a microsphere with a double-layered shell in a polymer matrix under the action of a shock wave <u>D.S. Boykov</u> Keldysh Institute of Applied Mathematics of Russian Academy of Sciences, Moscow, Russia

September 12 (Friday)

Panorama, Hall A

Section 1. Oral Session 6 (OS-1-6)

10.00-11.25

1	Invited report	Estimates of the energy of a magnetized bunch of runaway electrons by the time-of-flight method and from its microwave radiation <i>M.I. Yalandin, L. N. Lobanov, K. A. Sharypov, S. A. Shunailov, N. M. Zubarev</i> Institute of Electrophysics UB RAS, Ekaterinburg, Russia
2	Oral	Analysis of plasma dynamics in an alternating current hydrogen plasma torch at atmospheric pressure <i>Yu.D. Dudnik, N.V. Obratsov, A.A. Safronov, N.Y. Bykov, V.N. Shiryayev, A.V.Surov, O.B. Vasilieva</i> Institute for Electrophysics and Electric Power RAS, St. Petersburg, Russia
3	Oral	The influence of runaway electrons on the energy characteristics of self-sustained subnanosecond discharge in hydrogen <i>S.N. Ivanov, V.V. Lisenkov</i> Institute of Electrophysics UB RAS, Ekaterinburg, Russia
4	Oral	Self-oscillatory secondary emission discharge and its applications <i>I.A. Sorokin</i> Kotelnikov Institute of Radio Engineering and Electronics (Fryazino Branch), Russian Academy of Sciences, Moscow, Russia

Panorama, Hall B

Section 2. Oral Session 5 (OS-2-5)

10.00-11.25

1	Oral	High-rate deposition of Zn thin films from a cluster plasma of a low-pressure arc <i>D.R. Emlin, N.V. Gavrilov</i> Institute of Electrophysics UB RAS, Ekaterinburg, Russia
2	Oral	Application of boron carbide coatings by pulsed electron beam evaporation <i>D.A. Shpanov, M.S. Vorobyov, R.A. Kartavtsov, S.Yu. Doroshkevich, E.A. Petrikova</i> Institute of High Current Electronics SB RAS, Tomsk, Russia
3	Oral	Nitride vacuum-arc coatings to increase wear resistance of Cr12MoV die steel <i>A.A. Leonov, Yu.A. Denisova, V.V. Denisov, V.M. Savostikov, M.V. Savchuk, V.N. Tishchenko</i> Institute of High Current Electronics SB RAS, Tomsk, Russia
4	Oral	Application of assisting action of gas discharge plasma generated by an autonomous source for the formation of layers and antifriction coatings with vacuum-arc evaporation of SHS cathodes Ti-C-Mo-S <i>V.M. Savostikov, A.A. Leonov, V.V. Denisov, Yu.A. Denisova, M.A. Khimich, M.S. Syrtanov</i> Institute of High Current Electronics SB RAS, Tomsk, Russia

September 12 (Friday)

Panorama, Hall A

Section 1. Oral Session 7 (OS-1-7)

11.40-13.00

1	Oral	Bases for applying the LTE model to evaluate the state of plasma in an arcjet thruster <u>V.I. Gorbunkov</u> Omsk State Technical University, Omsk, Russia
2	Oral	Spectral energy characteristics' study of coaxial ablative pulsed plasma accelerator <u>D.S. Pasyukova</u> , <u>D.E. Polevoy</u> , <u>D.A. Gololobov</u> , <u>V.D. Telekh</u> Bauman Moscow State Technical University, Moscow, Russia
3	Oral	Numerical study of geometric errors in quarter-spherical energy analyzers for plasma flow diagnostics in electrodeless thruster <u>A.S. Aksenova</u> , <u>D.V. Kolodko</u> , <u>M.S. Novikov</u> , <u>A.V. Tumarkin</u> , <u>M.M. Kharkov</u> , <u>A.V. Kaziev</u> Institute of Radio Engineering and Electronics, Fryazino branch. Russian Academy of Sciences , Moscow, Russia
4	Oral	Investigation of electrical current in jet based on glow discharge <u>V.O. Nekhoroshev</u> , <u>N.V. Landl</u> , <u>A.V. Bolotov</u> , <u>Y.D. Korolev</u> , <u>O.B. Frants</u> , <u>V.G. Geyman</u> Institute of High Current Electronics SB RAS, Tomsk, Russia

Panorama, Hall B

Section 2. Oral Session 6 (OS-2-6)

11.40-13.00

1	Oral	Investigation of the properties of coatings based on the aluminum oxide system obtained by vacuum arc deposition method <u>A.A. Tulina</u> , <u>A.Yu. Nazarov</u> , <u>K.N. Ramazanov</u> Ufa University Of Science and Technology, Ufa, Russia
2	Oral	Study of temperature dynamics on the target surface under the influence of a pulsed electron beam of sub-millisecond duration <u>A.D. Teresov</u> , <u>T.V. Koval</u> , <u>P.V. Moskvina</u> Institute of High Current Electronics SB RAS, Tomsk, Russia
3	Oral	Effect of gas pressure on heating of nonconducting materials during their electron beam treatment <u>A.S. Klimov</u> , <u>I.Yu. Bakeev</u> , <u>A.A.Zenin</u> , <u>E.M. Oks</u> Tomsk state university of control systems and radioelectronics, Tomsk, Russia
4	Oral	The impact of the treatment method on the appearance of a surface alloy created through pulsed electron beam synthesis <u>E.A. Pesterev</u> , <u>E.V. Yakovlev</u> , <u>V.I. Petrov</u> , <u>A.V. Solovyov</u> , <u>A.B. Markov</u> Tomsk Scientific Center of the Siberian Branch of the Russian Academy of Sciences, Tomsk, Russia

September 12 (Friday)

Panorama, Hall A

Section 1. Oral Session 8 (OS-1-8)

14.00-16.00

1	Oral	Patterns of generation of emission beam-plasma formation in a hollow cathode of a non-self-sustained glow discharge <i>A.O. Egorov, V.V. Denisov, S.S. Kovalskiy, E.V. Ostroverchov, V.V. Yakovlev, A.D. Teresov</i> Institute of High Current Electronics SB RAS, Tomsk, Russia
2	Oral	Patterns of generation of extended gas-metal beam-plasma formations <i>M.V. Savchuk, V.V. Denisov, S.S. Kovalsky, A.A. Leonov</i> Institute of High Current Electronics SB RAS, Tomsk, Russia
3	Oral	Extended hollow cylindrical grid electron emitter based on low pressure arc discharge <i>E. V. Ostroverkhov, V. V. Denisov, S. S. Kovalsky, V.V. Krivshenko</i> Institute of High Current Electronics SB RAS, Tomsk, Russia
4	Oral	Reduction of azimuthal inhomogeneity of a radially converging electron beam in a grid plasma cathode source <i>M.S. Torba, S.Yu. Doroshkevich, M.S. Vorobyov, A.A. Grishkov, N.N. Koval, M.G. Volis</i> Institute of High Current Electronics SB RAS, Tomsk, Russia
5	Oral	Competing types of electron emission in a grid plasma emitter based on a low-pressure arc <i>R.A. Kartavtsov, M.A. Mokeev, M.S. Vorobyov, A.A. Grishkov, N.N. Koval, S.Y. Doroshkevich, P.V. Moskvina, D.A. Gorkovskaya</i> Institute of High Current Electronics SB RAS, Tomsk, Russia
6	Oral	Plasma emission spectrum formed during microprotrusion explosion <i>E. V. Oreshkin</i> P.N. Lebedev Physical Institute of the Russian Academy of Sciences, Moscow, Russia

Panorama, Hall B

Section 2. Oral Session 7 (OS-2-7)

14.00-16.00

1	Oral	Effect of titanium content on the structure and properties of boride coatings <i>E.O. Kraynova, A.S. Grenadyorov, K.V. Oskomov, N.E. Madzhara, A.N. Zakharov, A.A. Solovyev</i> Institute of High Current Electronics SB RAS, Tomsk, Russia
2	Oral	Growth and characterization of W layers co-deposited in HiPIMS discharge in H₂/He/Ar mixtures <i>G.S. Lomonosov, D.V. Kolodko, A.V. Tumarkin, M.M. Kharkov, A.V. Kaziev</i> National Research Nuclear University, Moscow, Russia
3	Oral	Hydrogenated carbon coatings with silicon and oxygen, alloyed with metals <i>N.E. Madzhara, A.S. Grenadyorov, A.A. Solovyev</i> Institute of High Current Electronics SB RAS, Tomsk, Russia
4	Oral	Properties of organosilicon coatings remotely deposited from glow discharge in argon and hexamethyldisiloxane mixture flow <i>D.A. Zuzva, V.O. Nekhoroshev, A.G. Korzhova, A.N. Gorbunov</i> Institute of High Current Electronics SB RAS, Tomsk, Russia
5	Oral	Study of the Ni – 13.9 wt. % W alloy annealing possibility using ion-beam treatment <i>K.V. Shalomov, N.V. Gushchina, V.V. Ovchinnikov, I.V. Gervasyeva, V.I. Voronin</i> Institute of Electrophysics UB RAS, Ekaterinburg, Russia
6	Oral	Investigation of low-energy light ion sputtering of tungsten films in the linear plasma device with a beam plasma <i>N.S. Sergeev, Yu. Gasparyan</i> National Research Nuclear University, Moscow, Russia

September 12 (Friday)

Panorama, Hall A

Section 1. Oral Session 9 (OS-1-9)
16.15-17.45

1	Oral	Kinetics and dynamics of runaway electrons in gas diodes with conical cathodes <i>N.M. Zubarev, A.V. Kozyrev, N.S. Semeniuk, M.I. Yalandin, O.V. Zubareva</i> Institute of Electrophysics UB RAS, Ekaterinburg, Russia
2	Oral	The study of ion-electron emission and sputtering of perspective materials for the inertial electrostatic confinement fusion device cathode <i>E.D. Zyablitseva, I.A. Prokuratov, Yu.V. Mikhailov, A.S. Bakulina</i> Dukhov Automatics Research Institute, Moscow, Russia
3	Oral	Effect of the magnetic field on the structure of the penning ion source discharge <i>A.E. Kolobov, S.V. Syromukov</i> Dukhov Automatics Research Institute, Moscow, Russia
4	Oral	Investigation of the regularity of plasma generation inside extended metal cavities for ion-plasma treatment <i>D.Yu. Ignatov</i> Institute of High Current Electronics SB RAS, Tomsk, Russia

Panorama, Hall B

Section 2. Oral Session 8 (OS-2-8)
16.15-17.45

1	Oral	Diffuse and microchannel forms of high-voltage nanosecond discharge in dense gases <i>M.I. Lomaev, D.V. Beloplotov, D.A. Sorokin</i> Institute of High Current Electronics SB RAS, Tomsk, Russia
2	Oral	Combined control of electron beam power in an electron source with a multi-arc grid plasma cathode <i>M.A. Mokeev, V.N. Devyatkov, D.A. Gorkovskaia, M.S. Vorobyov, N.N. Koval, P.V. Moskvina</i> Institute of High Current Electronics SB RAS, Tomsk, Russia
3	Oral	Methods of implementing stable modes of electron beam generation in a source with a plasma cathode <i>D.A. Gorkovskaia, M.S. Vorobyov, M.A. Mokeev, V.N. Devyatkov, A.A. Grishkov, S. Yu. Doroshkevich</i> Institute of High Current Electronics SB RAS, Tomsk, Russia
4	Oral	Change in the microrelief of the surface of the polypropylene activated in low-temperature atmospheric pressure plasma <i>K.A. Demin, S.S. Agnaev, S.D. Dondukov, A.N. Khagleev, A.P. Semenov</i> Institute of Physical Materials Science SB RAS, Ulan-Ude, Russia

Institute of Electrophysics (10.09.2025)

Sections 1 – 4. Poster Session

14.00-17.00

1-3-P	CHARACTERISTICS OF AN ARC DISCHARGE WITH AN INCANDESCENT AND A HOLLOW CATHODE <i>I.I. AZHAZHA, V.V. SHUGUROV, Yu.H. AKHMADEEV</i> Institute of High Current Electronics SB RAS, Tomsk, Russia
1-4-P	DETECTION OF RUNAWAY ELECTRODES IN RED SPRITE SIMULATIONS USING CAPACITIVE DISCHARGE PLASMA <i>E.Kh. BAKSHT, V.F. TARASENKO, N.P. VINOGRADOV</i> Institute of High Current Electronics SB RAS, Tomsk, Russia
1-5-P	TRICHEL PULSES AND THE PRECEDING STAGE IN A NEGATIVE CORONA DISCHARGE <i>E.Kh. BAKSHT, V.F. TARASENKO</i> Institute of High Current Electronics SB RAS, Tomsk, Russia
1-7-P	DYNAMICS OF ELECTROPHYSICAL AND THERMOMECHANICAL PROCESSES DURING ELECTRICAL EXPLOSION OF CONDUCTORS IN SKIN MODE <i>G.Sh. BOLTACHEV, S.A. CHAIKOVSKY</i> Institute of Electrophysics UB RAS, Ekaterinburg, Russia
1-8-P	MEASUREMENTS OF PLASMA PROPERTIES IN ELECTRON BEAM TRANSPORT CHANNEL WITH BIPOLAR ION-OPTICAL SYSTEM <i>V.I. GUSHENETS, A.S. BUGAEV</i> Institute of High Current Electronics SB RAS, Tomsk, Russia
1-9-P	PROTON BEAM TRANSPORT THROUGH A SPACE CHARGE (PLASMA) LENS <i>U.V. KHOMUTOVA, A.S. BUGAEV, V.I. GUSHENETS, V.P. FROLOVA, E.M. OKS</i> Institute of High Current Electronics SB RAS, Tomsk, Russia
1-10-P	FEATURES OF MAGNETIC FIELD DIFFUSION DURING THE EXPLOSION OF FLAT PERFORATED CONDUCTORS <i>I.M. DATSKO, S.A. CHAIKOVSKY, V.A. VAN'KEVICH, N.A. LABETSKAYA, V.I. ORESHKIN</i> Institute of High Current Electronics SB RAS, Tomsk, Russia
1-12-P	RADIATIVE INFLUENCE OF ENERGY EXCHANGE IN AR+H ₂ PLASMA ARC PROCESSES <i>N.V. OBRAZTSOV, N.K. KURAKINA, S.A. AVERYANOVA, R.I. ZHILIGOTOV, IU.V. MURASHOV</i> Peter the Great St.Petersburg Polytechnic University, St. Petersburg, Russia
1-14-P	NUMERICAL MODELING OF PLASMA FLOW IN ABLATIVE PULSED ACCELERATOR <i>D.A. EGOSHIN, Y.M. GRISHIN, V.D. TELEKH</i> Moscow State Bauman University, Moscow, Russia
1-18-P	ON THE ISSUE OF CURRENT DISTRIBUTION BETWEEN CATHODES IN A HIGH-CURRENT PENNING-TYPE DISCHARGE <i>E.M. OKS, V.I. GUSHENETS, A.S. BUGAEV, V.P. FROLOVA, K.A. SHCHEGLOV</i> Institute of High Current Electronics SB RAS, Tomsk, Russia
1-19-P	STUDY OF THE MASS-CHARGE ION BEAM COMPOSITION OF A VACUUM ARC PLASMA SOURCE USING THE ELECTROMAGNETIC METHOD <i>V.I. GUSHENETS, A.S. BUGAEV, E.M. OKS</i> Institute of High Current Electronics SB RAS, Tomsk, Russia
1-21-P	MECHANISM OF CONTRACTION OF SELF-SUSTAINED SUBNANOSECOND DISCHARGE <i>S.N. IVANOV, V.V. LISENKOV</i> Institute of Electrophysics UB RAS, Ekaterinburg, Russia
1-27-P	OBSERVATION OF THE TRANSIENT STAGES BETWEEN PULSED MAGNETRON DISCHARGE AND LOW-VOLTAGE MODES USING DIFFERENT POWER SUPPLIES <i>A.V. KAZIEV, N.S. SAZONOV, D.V. KOLODKO</i> National Research Nuclear University, Moscow, Russia
1-28-P	PLASMA DIFFUSE JET IN DIELECTRIC TUBE AS THE LABORATORY ANALOGUE OF ATMOSPHERIC PHENOMENA <i>A.O. KOKOVIN, A.V. KOZYREV, V.F. TARASENKO</i>

	Institute of High Current Electronics SB RAS, Tomsk, Russia
1-30-P	CALIBRATION OF LIDS RESULTS AGAINST ABSOLUTE PRESSURE MEASUREMENTS FOR REMOTE DIAGNOSTICS OF HYDROGEN RETENTION <i>D.V. KOLODKO, G.I. RYKUNOV, M.S. GRACHEV, A.V. TUMARKIN, A.V. KAZIEV, Yu.M. GASPARYAN</i> Institute of Radio Engineering and Electronics, Fryazino branch. Russian Academy of Sciences, Moscow, Russia
1-32-P	FEATURES OF THE PARASITIC CURRENTS IN PSEUDOSPARK SWITCH FOR DIFFERENT METHODS OF THE SWITCH TRIGGERING <i>Y.D. KOROLEV, N.V. LANDL, O.B. FRANTS, V.G. GEYMAN, A.V. BOLOTOV, V.O. NEKHOROSHEV, M.S. TORBA</i> Institute of High Current Electronics SB RAS, Tomsk, Russia
1-33-P	SWITCHING PROCESS IN THE PSEUDOSPARK SWITCH AT DIFFERENT ELECTRIC CIRCUITS FOR TRIGGERING AND DIFFERENT DESIGNS OF THE TRIGGER UNIT <i>Y.D. KOROLEV, N.V. LANDL, O.B. FRANTS, V.G. GEYMAN, A.V. BOLOTOV, V.O. NEKHOROSHEV, S.S. KOVALSKY, E.V. OSTROVERKHOV</i> Institute of High Current Electronics SB RAS, Tomsk, Russia
1-34-P	SIMULATION OF PLASMA-BEAM FORMATION IN A HOLLOW CATHODE WITH METAL PLASMA GENERATORS <i>T.V. KOVAL, D.D. ZAYTSEV, V.V. DENISOV, M.V. SAVCHUK</i> Institute of High Current Electronics SB RAS, Tomsk, Russia
1-35-P	SWITCHING CHARACTERISTICS OF SPARK DISCHARGES IN STATIC BREAKDOWN MODE AT PRESSURES OF 20-140 ATMOSPHERES <i>B.A. KOZLOV, D.S. MAKHANKO</i> Ryazan State Radio Engineering University named after V.F. Utkin, Ryazan, Russia
1-36-P	NONLINEAR DIFFUSION OF A STRONG MAGNETIC FIELD IN A CONDUCTORS WITH SMALL TIMES OF ITS RAISE <i>N.A. LABETSKAYA, S.A. SOROKIN, I.M. DATSKO, S.A CHAIKOVSKY, V.A. VANKEVICH, V.I. ORESHKIN</i> Institute of High Current Electronics SB RAS, Tomsk, Russia
1-37-P	FORMATION OF GAS-FILLED BUBBLES IN AN SALINE SOLUTION AT A NEGATIVE POLARITY OF FLAT ACTIVE ELECTRODE <i>N.V. LANDL, A.V. BOLOTOV, Y.D. KOROLEV, O.B. FRANTS, V.G. GEYMAN, V.O. NEKHOROSHEV</i> Institute of High Current Electronics SB RAS, Tomsk, Russia
1-43-P	CONDITIONING A MOLYBDENUM CATHODE SURFACE BY HIGH-VOLTAGE SUBNANOSECOND PULSES <i>Yu.I. MAMONTOV, Yu.A. ZEMSKOV, I.V. UIMANOV</i> Institute of Electrophysics UB RAS, Ekaterinburg, Russia
1-44-P	KINETICS OF THE RADIAL RUNAWAY ELECTRON FLOW IN A TRANSVERSAL MAGNETIC FIELD <i>Yu.I. MAMONTOV, M.I. YALANDIN, N.M. ZUBAREV</i> Institute of Electrophysics UB RAS, Ekaterinburg, Russia
1-45-P	MEASUREMENT OF W-FUZZ CATHODE VACUUM ARCS OPERATION TIME DEPENDING ON THE W-FUZZ THICKNESS <i>P.S. MIKHAILOV, I.L MUZYUKIN, Yu.A. ZEMSKOV, I.V. UIMANOV</i> Institute of Electrophysics UB RAS, Ekaterinburg, Russia
1-46-P	MEASUREMENTS OF VACUUM ARC THRESHOLD CURRENT FOR CADMIUM CATHODE: CUTOFF CURRENT AND ARC INITIATION PROBABILITY <i>P.S. MIKHAILOV, I.L MUZYUKIN, I.V. UIMANOV</i> Institute of Electrophysics UB RAS, Ekaterinburg, Russia
1-47-P	MEASUREMENT OF THE TOTAL ION CURRENT IN AN ARC DISCHARGE ON A W-FUZZ SURFACE AT CURRENTS CLOSE TO THE THRESHOLD <i>I.L MUZYUKIN, P.S. MIKHAILOV, Yu.A. ZEMSKOV, I.V. UIMANOV</i> Institute of Electrophysics UB RAS, Ekaterinburg, Russia
1-48-P	USING A THOMSON SPECTROMETER TO ANALYZE THE PLASMA FLOW OF A VACUUM ARC

	<i>I.L. MUZYUKIN, P.S. MIKHAILOV</i> Institute of Electrophysics UB RAS, Ekaterinburg, Russia
1-50-P	EROSION OF VACUUM ARC CATHODES AT DIFFERENT DURATIONS OF CURRENT PULSES <i>A.G. NIKOLAEV, V.D. GRIDILEV, E.M. OKS, G.Yu. YUSHKOV</i> Institute of High Current Electronics SB RAS, Tomsk, Russia
1-51-P	MULTI-CHARGED IONS OF CONDUCTIVE MATERIALS IN PLASMA OF HIGH-CURRENT VACUUM ARC DISCHARGE OF SUBMICROSECOND DURATION <i>A.G. NIKOLAEV, V.P. FROLOVA, A.V. NIKONENKO</i> Institute of High Current Electronics SB RAS, Tomsk, Russia
1-52-P	ASYMMETRIC PLASMA OF LOW - PRESSURE DISCHARGE <i>S.P. NIKULIN</i> Institute of Electrophysics UB RAS, Ekaterinburg, Russia
1-59-P	BREAKDOWN FEATURES OF ULTRA-HIGH-MOLECULAR-WEIGHT POLYETHYLENE UNDER NANOSECOND PULSES <i>I.F. PUNANOV, R.V. EMLIN, P.A. MOROZOV, V.D. KULIKOV, S.S. GOSTEV, A.S. ZABOLOTNOV</i> Institute of Electrophysics UB RAS, Ekaterinburg, Russia
1-60-P	STRUCTURE OF PLASMA JETS FORMED BY A HIGH-CURRENT VACUUM ARC DISCHARGE <i>A.G. ROUSSKIKH, A.S. ZHIGALIN, V.I. ORESHKIN, A.M. KUZMINYKH, D.L. SHMELEV, V.A. GASILOV</i> Institute of High Current Electronics SB RAS, Tomsk, Russia
1-63-P	VACUUM ARC PLASMA DECAY AFTER INTERRUPTION OF THE DISCHARGE CURRENT WITH COMPOUND COPPER-CHROMIUM CATHODE <i>K.P. SAVKIN, E.M. OKS, A.G. NIKOLAEV, V.P. FROLOVA, G.Yu. YUSHKOV</i> Institute of High Current Electronics SB RAS, Tomsk, Russia
1-65-P	MINIMUM BREAKDOWN VOLTAGES OF COAXIAL DIODE FILLED WITH RAREFIED GAS <i>N.S. SEMENIUK, A.V. KOZYREV</i> Institute of High Current Electronics SB RAS, Tomsk, Russia
1-67-P	PASCHEN CURVES OF THE "PHYSICALLY PURE" ABNORMAL DISCHARGE IN HELIUM, HYDROGEN AND ITS MIXTURES <i>G.V. SHEVCHENKO, P.A. BOKHAN, P.P. GUGIN, M.A. LAVRUKHIN, D.E. ZAKREVSKY</i> Rzhanov Institute of Semiconductor Physics, Novosibirsk, Russia
1-68-P	MODELING THE DEVELOPMENT OF A MACROSCOPIC PLASMA JET FORMED BY A HIGH-CURRENT VACUUM-ARC DISCHARGE <i>D.L. SHMELEV, V.I. ORESHKIN, A.G. ROUSSKIKH</i> Institute of Electrophysics UB RAS, Ekaterinburg, Russia
1-69-P	SUPRATHERMAL ELECTRONS IN EXPANDING PLASMA OF VACUUM ARC JET <i>D.L. SHMELEV, S.A. BARENGOLTS, I.V. UIMANOV</i> Institute of Electrophysics UB RAS, Ekaterinburg, Russia
1-70-P	EFFECT OF DOUBLE PULSES FOR RUNAWAY ELECTRONS EMISSION IN AN AIR GAP <i>S.A. SHUNAILOV, N.M. ZUBAREV, L.N. LOBANOV, M.R. ULMASKULOV, K.A. SHARYPOV, M.I. YALANDIN</i> Institute of Electrophysics UB RAS, Ekaterinburg, Russia
1-72-P	PERIODIC STRUCTURE OF A PLASMA CHANNEL OF A LOW-CURRENT DISCHARGE IN AN ARGON FLOW AT ATMOSPHERIC PRESSURE <i>D.A. SOROKIN, D.V. BELOPLOTOV, K.P. SAVKIN</i> Institute of High Current Electronics SB RAS, Tomsk, Russia
1-77-P	EXPERIMENTAL MODELING OF "GLOW" AND "BEADS" AREAS IN RED SPRITE ANALOGUE DISCHARGES <i>V.F. TARASENKO, E.Kh. BAKSHT, V.P. VINOGRADOV</i> Institute of High Current Electronics SB RAS, Tomsk, Russia
1-78-P	FEATURES OF DIRECT CURRENT MICRODISCHARGES BETWEEN METAL AND LIQUID ELECTROLYTE ELECTRODES IN AN OPEN ATMOSPHERE <i>G.K. TAZMEEV, K.K. TAZMEEV</i>

	Kazan Federal University, Naberezhnye Chelny, Russia
1-80-P	SHOCK WAVE PROPAGATION IN A HIGH-PRESSURE GAS-DISCHARGE CHAMBER, COMPARISON OF EXPERIMENT AND NUMERICAL MODELING <i>J.V. TRIASKIN, A.V. BUDIN, M.E. PINCHUK, TRYASKIN N.V., A.A. BOGOMAZ</i> Institute for Electrophysics and Electric Power RAS, St. Petersburg, Russia
1-83-P	NUMERICAL ASSESSMENT OF A MAGNETIC FILTER INFLUENCE ON THE ICP DISCHARGE IN A PLASMA SOURCE WITH 4 RADIO-FREQUENCY DRIVERS <i>V. A. VOINTSEV, I. V. SHIKHOVTSEV, D. Yu. GAVRISENKO</i> Budker Institute of Nuclear Physics, Novosibirsk, Russia
1-85-P	MODEL OF INDUCTIVE DISCHARGE IN A Ne-H ₂ MIXTURE <i>S.A. YAMPOLSKAYA, A.G. YASTREMSKII, D.S. CHURKIN, R.A. TKACHENKO, E.S. KARGAPOLTSEV</i> Institute of High Current Electronics SB RAS, Tomsk, Russia
1-88-P	NUMERICAL SIMULATION OF THE GENERATION OF THE PLASMA FORMATION IN A HOLLOW ANODE FOR VACUUM ARC PLASMA ASSISTED DEPOSITION SYSTEM <i>D.D. ZAYTSEV, T.V. KOVAL, V.V. DENISOV, M.V. SAVCHUK</i> Institute of High Current Electronics SB RAS, Tomsk, Russia
1-89-P	INVESTIGATION OF THE FACTORS INFLUENCING THE COPPER CATHODE CONDITIONING PROCESS <i>Yu.A. ZEMSKOV, Yu.I. MAMONTOV, I.V. UIMANOV</i> Institute of Electrophysics UB RAS, Ekaterinburg, Russia
1-90-P	STUDY OF THE ION COMPOSITION OF SHORT-DURATION VACUUM ARC PLASMA WITH SUBMICROSECOND TIME RESOLUTION <i>Yu.A. ZEMSKOV, I.V. UIMANOV</i> Institute of Electrophysics UB RAS, Ekaterinburg, Russia
1-91-P	INFLUENCE OF AXIAL MAGNETIC FIELD ON THE CHARGED PARTICLE FLOW FROM A CONICAL CATHODE IN A GAS IN THE SPACE-CHARGE-LIMITED CURRENT MODE <i>N.M. ZUBAREV, M.A. BELYAEV, O.V. ZUBAREVA</i> Institute of Electrophysics UB RAS, Ekaterinburg, Russia
1-93-P	DIMENSIONS OF NEAR-CATHODE PLASMA MICROREGIONS—SOURCES OF RUNAWAY ELECTRONS—UNDER CONDITIONS OF A SHARPLY INHOMOGENEOUS ELECTRIC FIELD <i>O.V. ZUBAREVA, M.I. YALANDIN, N.M. ZUBAREV</i> Institute of Electrophysics UB RAS, Ekaterinburg, Russia
1-94-P	ESTIMATES OF AVALANCHE PARAMETERS FOR SUBRELATIVISTIC RUNAWAY ELECTRONS IN A SUPERCRITICAL ELECTRIC FIELD <i>O.V. ZUBAREVA, N.M. ZUBAREV</i> Institute of Electrophysics UB RAS, Ekaterinburg, Russia
2-2-P	PILOT TECHNOLOGICAL INSTALLATION OF ELECTRON BEAM SYNTHESIS OF CERAMIC COATINGS IN A FOREVACUUM <i>A.A. ANDRONOV, D.B. ZOLOTUKHIN, A.V. TYUNKOV, Yu.G. YUSHKOV</i> Tomsk State University of Control Systems and Radioelectronics, Tomsk, Russia
2-6-P	PULSED ELECTRIC-FIELD-INDUCED SURFACE MODIFICATION IN NATURAL GALENA <i>I.Zh. BUNIN, I.A. KHABAROVA, M.V. RYAZANTSEVA</i> The N.V. Melnikov Institute of Comprehensive Exploitation of Mineral Resources of Russian Academy of Science, Moscow, Russia
2-7-P	DEPOSITION BY DIFFUSION FLUX <i>D.A. BUTNIAKOV, I.A. SOROKIN, D.V. KOLODKO</i> National Research Nuclear University, Moscow, Russia
2-13-P	THE MECHANISM OF CONTRACTION OF A JET RADIO-FREQUENCY INDUCTIVELY COUPLED DISCHARGE AT INTERMEDIATE PRESSURE <i>A.A. ESINALIN, V.S. ZHELTUKHIN, A.Y. SHEMAKHIN</i> Kazan Federal University, Kazan, Russia
2-15-P	PHYSICAL MECHANISM OF A TiHfN COATING ACTIVATION BY INTERMEDIATE PRESSURE RF PLASMA <i>M.M. GREBENSHCHIKOVA, O.R. GREBENSHCHIKOV, V.S. ZHELTUKHIN</i> Kazan National Research Technological University, Kazan, Russia

2-16-P	DC MAGNETRON DEPOSITION WITH PURE BORON TARGET IN REACTIVE GASES ATMOSPHERES <i>V.D. GRIDILEV, G.Yu. YUSHKOV</i> Institute of High Current Electronics SB RAS, Tomsk, Russia
2-17-P	WIDE-APERTURE SOURCE OF LOW-ENERGY ION BEAMS FOR PRECISION ADDITIVE MANUFACTURING <i>H.Sh. HIZRIEV, N.A. ASHURBEKOV, M.Z. ZAKARYAEVA, K.O. IMINOV, K.M. RABADANOV, G.S. SHAKHSINOV</i> Dagestan State University, Makhachkala, Russia
2-20-P	Gd-O-N COATINGS DEPOSITED BY REACTIVE ANODIC EVAPORATION IN LOW PRESSURE ARC <i>A.S. KAMENETSKIKH, P.V. TRETNIKOV, A.V. CHUKIN, D.A. MANDRYGINA</i> Institute of Electrophysics UB RAS, Ekaterinburg, Russia
2-21-P	THE EFFECT OF THE MOLECULAR MODIFIER STRUCTURE ON THE RADIATION STABILITY OF HYBRID HALIDE PEROVSKITES <i>E.V. KATKOV, I.S. ZHIDKOV, V.V. OZEROVA, P.A. TROSHIN</i> Ural Federal University, Ekaterinburg, Russia
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