VIII International Conference

Plasma Physics and Plasma Technology

Final Program

Minsk, Belarus,
September 14 – 18, 2015

Institue of Physics
National Academy of Sciences of Belarus

VIII International Conference

Plasma Physics and Plasma Technology

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Program

CONFERENCE ORGANIZERS

The National Academy of Sciences of Belarus
The State Scientific Institution
"B.I. Stepanov Institute of Physics of the National Academy of Sciences of Belarus"
Scientific Council of NAS Belarus "Plasma Physics and Plasma Technology"

Russian Academy of Sciences
The Federal State Budget Institution of Science
"Joint Institute for High Temperatures RAS"
Scientific Council of RAS "Physics of Low Temperature Plasma"

The al-Farabi Kazakh National University

CO-OPERATING WITH AND SPONSORED BY:

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The National Nanotechnological Laboratory of Open Type, al-Farabi Kazakh National University
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TOPICS

1. **Electrical and optical discharges, elementary and near-electrode processes**
   (corona, streamer, spark, barrier, surface, glow, high-frequency, arc, and optical discharges; discharges in liquids; microplasma discharges and plasma jets).
2. **Transport, optical, and thermodynamic properties of plasma**
   (plasma dynamics, heating mechanisms, plasma diagnostics).
3. **Generation and interaction of concentrated energy fluxes with a surface**
   (*plasma accelerators; electron and ion beam sources; modification of properties of materials and coatings by electromagnetic radiation, and electron or ion beams; reactions on a surface; laser and plasma treatment of materials; plasma deposition of coatings)*.
4. **Non-ideal and dusty plasmas.**
5. **Plasma applications**
   (synthesis of nanoscale structures, nanotubes and fullerenes; plasma light sources; plasma medicine and plasma biology; plasma in engineering industry, micro- and nanoelectronics, chemistry, metallurgy, ecology, spectrochemical analysis, etc.).

Monday – September 14

7:00 – 22:00 **Arrival, registration, sightseeing tour of Minsk**

Tuesday – September 15, Morning

Hall I:
9:30 – 10:00 **Opening Ceremony**

Plenary Session

10:00 – 10:45

1. **Fortov V.E.**

   SHOCK WAVE COMPRESSION OF NONIDEAL PLASMAS AT MEGABARS: CORRELATIONS AND DEGENERACY

10:45 – 11:00 Coffee Break

11:00 – 11:45

2. **Ramazanov T.S.**

   EQUILIBRIUM AND TRANSPORT PROPERTIES OF COMPLEX PLASMAS

11:45 – 12:30

3. **Astashynski V.M.**

   QUASI-STATIONARY HIGH CURRENT PLASMA ACCELERATORS AND THEIR POTENTIALITIES IN SCIENCE AND TECHNOLOGIES

12:30 – 12:55

4. **Piscalov A.**

   IN-DEPTH REVIEW OF STANDA LTD. ACTIVITIES: MOTION CONTROL, PRECISION MECHANICS, APPLICATIONS

13:00 – 14:00 Lunch

Tuesday – September 15, Afternoon

Hall I

14:00 – 16:15 **Topical Session**

SECTION 5. Plasma applications

14:00 – 14:25

5.03 INTERACTION OF LOW-PRESSURE ARGON PLASMA WITH POLYMER MATERIALS
V.A. Titov , S.A. Smirnov , T.G. Shikova , A.A. Ovtsyn , D.V. Kadnikov

14:25 – 14:50

5.04 HYBRID PLASMA-CATALYTIC REFORMING OF LIQUID RENEWABLE HYDROCARBONS INTO SYNTHESIS GAS
V. Chernyak, O. Nedybaliuk, E. Martysh, Ol. Solomenko, I. Fedirchik, V. Iukhymenko, V. Shapoval, I. Prysiazhnevych, Iu. Veremii

14:50 – 15:15

5.05 PLASMA PROPERTIES TO MAKE MICROWAVE DEVICES RECONFIGURABLE
Callegari Thierry, A. Kallel, L. Liard, O. Pascal, R. Pascaud, F. Pizarro, L.V. Simonchik, J. Sokoloff, M.S. Usachonak

15:15 – 15:30

5.06 DETERMINATION OF MODIFIED-LAYER THICKNESS OF GLOW DISCHARGE-TREATED PTFE FILM
M. Yablokov, I. Sokolov, O. Malinovskaya, A. Gilman, A. Kuznetsov

15:30 – 15:45

5.07 INVESTIGATION OF THE LOW-FREQUENCY INDUCTIVE DISCHARGE OF TRANSFORMER TYPE TO DEVELOP A NEW METHOD OF LARGE-SCALE PLASMA PROCESSING
M. Isupov, A. Fedoseev, G. Sukhinin

15:45 – 16:00

5.08 MICROWAVE METHOD FOR THE SYNTHESIS OF MICRO AND NANO SIZE PARTICLES IN HIGH-PRESSURE GYROTRON DISCHARGE
N. Skvortsova, G. Batanov, V. Borzosekov, D. Golberg, L. Iskhakova, L. Kolik, E. Konchekov, N. Kharchev, A. Letunov, D. Malakhov, F. Milovich, E. Obraztsova, E. Obraztsova, A. Petrov, I. Ryabikina, K. Sarksian and V. Stepakhin

16:00 – 16:15

5.09 THE USE OF CATHODIC ARC DEPOSITION TO IMPART THE SPECIAL PROPERTIES TO TEXTILE MATERIAL SURFACE
I. Smyaglikov

16:15 – 16:30 Coffee Break

Tuesday – September 15, Afternoon

Hall II

14:00 – 16:15 **Topical Session**

SECTION 3. Generation and interaction of concentrated energy fluxes with a surface

14:00 – 14:25

3.03 THE EXPERIMENTAL RESEARCH OF INTERMEDIATE (BARRIER) SILICON AND GERMANIUM COATINGS DEPOSITION ON THE SUBSTRATES NOT INCLINED TO THE FORMATION OF CARBIDES
D. Ivanov, D. Malyuta, S. Pavlov, A. Rodin, N. Sarkarov, A. Shedrov

14:25 – 14:50

3.04 STUDY OF DIAMOND AND GRAPHITE PHYSICAL PROPERTIES UNDER NANO- AND PICOSECOND LASER ACTION
R.S. Belikov, A.P. Bolshakov, A.P. Bazhulin, V.E. Fortov, K.V. Khishchenko, A.A. Khomich, V.I. Konov, I.K. Krasyuk, P.P. Pashinin, V.G. Ralchenko, O. Rosmej, T. Rienecker, A.Yu. Semenov, A. Schoenlein, D.N. Sovyk, I.A. Stuchebryukhov, and M. Tomut

14:50 – 15:15

3.05 THE RESISTANCE OF ONE- AND TWO-DIMENSIONAL FLUX COMPRESSION GENERATOR MODEL
V. Haurylavets , V. Tikhomirov

15:15 – 15:30

3.06 INDUCED CHIRP OF LASER PULSE AND ITS EFFECT ON LANGMUIR WAVE AMPLITUDE IN PROPAGATION INTO A PLASMA CHANNEL
H. Akou, A. Banijamali

15:30 – 15:45

3.07 ION-BEAM SYNTHESIS OF ZINC-BASED NANOPARTICLES IN Si AND SiO_2
M.A. Makhavikou, F.F. Komarov, L.A. Vlasukova, O.V. Milchanin, I. N. Parkhomenko

15:45 – 16:00

3.08 THE STEAM AND PLASMA BUBBLE EVOLUTION ON LASER TREATING OF A SAMPLE BEING IN LIQUID
A.Yu Ivanov, A.V. Kapytski, S.V. Vasiliev

16:00 – 16:15

3.09 STRUCTURE AND PLASMONIC PROPERTIES OF PMMA LAYERS WITH ION-IMPLANTED SILVER NANOPARTICLES FOR DIFFRACTION GRATING SENSORS
A.L. Stepanov, V.I. Nuzhdin, V.F. Valeev, T.S. Kavetskyy

16:15 – 16:30 Coffee Break

Tuesday – September 15, Afternoon

Hall III

16:30 – 18:00 **Poster Sessions**

SECTION 5. Electrical and optical discharges, near-electrode processes

5.19 THE USE OF LOW-TEMPERATURE PLASMA IN THE FINISHING OF TEXTILE MATERIALS
A. Azanova, I. Abdullin

5.23 EFFECT OF PLASMA TREATMENT ON POLY(ETHYLENE TEREPHTHALATE) TRACK MEMBRANES
L. Kravets, V. Elinson, R. Ibragimov

5.25 DC MAGNETRON DISCHARGE FOR HIGH-RATE SPUTTERING
V.S. Mitin, A.F. Pal, A.N. Ryabinkin, A.O. Serov

5.27 SYNTHESIS OF FLUOROSILANES $SiHxF_{4-x}$ AND SiH_4 IN PLASMA OF VOLUME SELF-SUSTAINED DISCHARGE
K.N. Firsov, S.Yu. Kazantsev, O.D. Khorozova, I.G. Kononov, E.M. Kudryavtsev, A.A. Orlov, S.V. Podlesnykh

5.28 THE COMPACT PUMP GENERATOR FOR NON-CHAIN ELECTROCHEMICAL HF(DF) LASER WITH OUTPUT ENERGY 2 J AND FREQUENCY 50 Hz
V.D. Bochkov, S.Yu. Kazantsev, I.G. Kononov, S.V. Podlesnikh

5.29 EFFECT OF THE DIELECTRIC BARRIER SURFACE DISCHARGE TREATMENT OF DIFFERENT SOWING MATERIALS
A. Lazukin, S. Krivov, A.Nikitin, I. Lyubushkina, O. Grabelnych, V. Michalevskii, O. Novodvorskii

5.31 BILOGICAL ACTIVITY, PHYSICAL AND CHEMICAL PROPERIES OF PET TRACK MEMBRANES WITH NANOSTRUCTURED SURFACE
V. Elinson, A. Lyamin, L.Kravets, I. Kikot, O. Sylnitskaya

5.32 THE EFFECT OF LOW TEMPERATURE RF PLASMA TREATMENT ON MOULD FUNGY SURVIVING
I. Gontcharova, A.A. Arashkova, I.I. Filatova, N.I. Chubrik, V.A. Lyushkevich, S.V. Goncharik

5.33 AN INFLUENCE OF PRE-SOWING PLASMA TREATMENT ON THE EFFICACY OF FREE RADICALS PRODUCTION IN PERENNIAL PLANT SEEDS
I. Filatova, V. Azharonok, V. Lyushkevich, V. Mildaziene, R. Zukiene, G. Pauzaite

ALLOYING WITH Nb ATOMS UNDER COMPRESSION PLASMA FLOWS IMPACT
N.N. Cherenda, N.V. Bibik, V.V. Uglov, V.S. Shlychkov, V.M. Astashynski, A.M. Kuzmitski

5.45 FORMATION OF HARD SURFACE LAYERS ON THE BASE OF (Nb,Ti,W)C CARBIDES IN HARD ALLOY BY COMPRESSIVE PLASMA FLOWS
A.K. Kuleshov, V.V. Uglov, D.P. Rusalsky, V.M. Astashynski, A.M. Kuzmitski

5.46 SIMULATION OF ELECTROMAGNETIC PROPERTIES OF METAL NANOPARTICLES 2D-LAYER
V. Goncharov , K. Kozadaev, H. Mikitchuk

5.48 PLASMA REACTOR FOR HOLLOW GLASS MICROSPHERES PRODUCTION
V. Sauchyn, I. Khvedchyn, M. A. Binhussain, M. A. Almahboub, A. Lozhachnik

5.49 PLASMA TECHNOLOGY FOR FINE FIBERS PRODUCTION
V. Sauchyn, I. Khvedchyn, M. A. Binhussain, M. A. Almahboub, A. Lozhachnik, Hr. Dalholenka

5.50 INFLUENCE OF DEPOSITION PARAMETERS ON STRUCTURE AND THERMAL STABILITY OF TiAlN COATINGS PREPARED BY REACTIVE MAGNETRON SPUTTERING
Klimovich I.M., Komarov F.F., Ljudchik O.R., Zaikov V.V.

5.84 ONE-DIMENSIONAL PLASMA ELECTROMAGNETIC BAND GAP STRUCTURE AT POWERFULL MICROWAVE
Arkhipenko V.I., Simonchik L.V., Usachonak M.S.

Tuesday – September 15, Afternoon

Hall III

16:30 – 18:00 **Poster Sessions**

SECTION 3. Generation and interaction of concentrated energy fluxes with a surface

3.10 SURFACE PROPERTIES MODIFICATION ON FATIGUE OF Al-Si ALLOY SUBJECTED TO ELECTRON-BEAM TREATMENT
K.V. Alsaraeva, V. Gromov, S.V. Konovalov, Yu.F. Ivanov

3.11 USE OF THE MICROWAVES DIFFRACTION FOR THE DIAGNOSTICS OF CRATER GROWTH DURING A LASER-PLASMA TREATMENT OF MATERIALS
S.V.Vasiliev, N.V.Zharkiy, A.Yu.Ivanov

3.12 MODIFICATION OF A FILM–SUBSTRATE SYSTEM BY A LOW-ENERGY INTENSE PULSED ELECTRON BEAM
Yu. Ivanov, O Krysina, M. Rygina, E. Petrikova, A. Teresov, V.Shugurov, O. Ivanova, I. Ikonnikova

3.13 THE IMPACT OF CONCENTRATED ENERGY FLUXES ON THE SURFACE OF THE TOOL ALLOYS
M. Kovaleva, Yu. Tyurin, N. Vasilik, O. Kolisnichenko, M. Prozorova, M. Arseenko, V. Sirota, I. Pavlenko

3.14 ON IMPROVEMENT OF THE CURRENT DENSITY DISTRIBUTION IN LARGE-CROSS-SECTION BEAMS PRODUCED BY A MULTI-APERTURE PLASMA ELECTRON SOURCE
M.S. Vorobyov, N.N. Koval

3.15 GENERATION OF METAL-GAS PLASMA BY LOW-PRESSURE ARC DISCHARGES AND ITS APPLICATION
O. Krysina, N. Koval, I. Lopatin, V. Shugurov

3.16 ELECTRON SOURCE BASED ON A LOW-PRESSURE ARC DISCHARGE IN THE REGIME OF THE EMISSION CURRENT INCREASING
T. Koval, V. Devyatkov and Nguyen Bao Hung

3.17 APPLICATION OF THE PLASMA GRID EMITTER IN THE LARGE-APERTURE ELECTRON SOURCE
T.V. Koval, M.S. Vorobyov, Nguyen Bao Hung

3.18 WIDE-APERTURE ARC PLASMAGENERATORS FOR MODIFICATION OF THE SURFACE OF MATERIALS AND PRODUCTS
V.V. Shugurov, N.N. Koval

3.19 MODIFICATION OF THE METAL SURFACES BY NANOSECOND DIFFUSE DISCHARGE IN NITROGEN FLOW
M. Erofeev, M. Shulepov, V. Tarasenko

3.20 SYNTHESIS OF THE SURFACE ALLOYS AT A HIGH-INTENSITY PULSED ELECTRON BEAM TREATMENT OF THE FILM / SUBSTRATE SYSTEM
E. Petrikova, Yu. Ivanov, A. Teresov, O. Krysina

3.21 SURFACE TREATMENT OF METALS BY PLASMA OF NON-SELF-MAINTAINED GAS DISCHARGE
O.I. Timoshenko, I.O. Misiruk, V.S. Taran, I.E. Garkusha

3.22 PULSED PLASMA FLOW INTERACTION WITH DIFFERENT STEEL SURFACES
A.M. Zhukeshov, A.T. Gabdullina, A.U.Amrenova, Z. Moldabekov, K.Serik, J. Rysbekova

3.23 SURFACE TRANSFORMATION OF METALLIC MATERIALS UNDER EXPOSURE TO HIGH-ENERGY PROCESSES
A.G. Anisovich, V. V. Azharonok., V.F.Gologan, V.A. Lyushkevich

3.24 ABLATION PROCESSING OF DENTAL TISSUE BY XeCl LASER RADIATION BEAM WITH VARIOUS PULSE DURATION
S. Anufrik, A. Volodenkov, K. Znosko

3.25 OXIDATION OF STEEL SURFACE WITH MICROSTRUCTURES FORMATION DUE TO NANOSECOND PULSED LASER IRRADIATION
A.N. Chumakov, I.S. Nikonchuk, B. Gakovic, S. Petrovic, M. Mitric, C. Lupulescu

3.26 EXTRACTION OF ELECTRONS FROM PLASMA WITH LIMITED EMISSION ABILITY
V.G.Zalesski, P.N.Soldatenko

3.27 SPECTROSCOPIC STUDIES OF SHOCK-COMPRESSED PLASMA LAYER FORMED UNDER COMPRESSION PLASMA FLOW ACTION
V.M. Astashynski, S.I. Ananin, E.A. Kostyukevich, A.M. Kuzmitski, P.N. Shoronov

3.28 MODELING OF DISCHARGE PROCESSES IN THE COMBINED GAS DISCHARGE FACILITY
V.V. Astashynski, M.I. Bogach, A.V. Buracheuski, Yu.S. Khadasevich

3.29 EFFECT OF He+ ION IRRADIATION ON STRUCTURE AND WEAR RESISTANCE OF TiAlN COATINGS DEPOSITED BY MAGNETRON SPUTTERING
S.V. Konstantinov, F.F. Komarov, V.V. Pilko, V.A. Kukareko

3.30 STRUCTURE AND SURFACE LAYER PROPERTIES EVOLUTION OF RAILS DURING THE LONG OPERATION
V.E Gromov, K.V. Morozov, O.A. Peregudov, Yu.F. Ivanov, K.V. Alsaraeva

3.31 STUDY OF DIAMOND AND GRAPHITE PHYSICAL PROPERTIES UNDER NANO- AND PICOSECOND LASER ACTION
R.S.Belikov, A.P.Bolshakov, A.P. Bazhulin, V.E.Fortov, K.V.Khishcheko, A.A.Khomich, V.I.Konov, I.K.Krasyuk, P.P. Pashinin, V.G.Ralchenko, O.Rosmej, T.Rienecker, A.Yu.Semenov, A.Schonlein, D.N.Sovyk, I.A.Stuchebrukhov, M. Tomut

3.32 INTERACTION OF HYPERVELOCITY PLASMA FLUX WITH A SURFACE
B. Zhestkov

3.33 RADIO FREQUENCY DISCHARGE PLASMA AND HELICON SOURCE FOR DIFFERENT APPLICATIONS
V. Kuzenov, T. Polozova, S. Ryzhkov

18:30 – 21:00 Welcome Party

Wednesday – September 16, Morning

Hall I

9:00 – 11:00 **Plenary Session**

9:00 – 9:45

1. **Akishev Yu.S.**

   NEW APPROACHES TO NON-THERMAL PLASMA ACTIVATION OF LIQUIDS BY LOW-CURRENT STREAMERS

9:45 – 10:10

2. **Soni Ravi**

   FORMATION OF IRON AND PALLADIUM NANOPARTICLES BY LIQUID PHASE PULSED LASER ABLATION

10:10 – 10:35

3. **Belmonte Thierry**

   INTERACTION MECHANISMS OF NANOSECOND DISCHARGES WITH ELECTRODES IN LIQUIDS

10:35 – 11:00

4. **Babin A.V.**

   DEVICES FOR PLASMA SPECTROSCOPY PRODUCED BY SOL INSTRUMENTS, LTD

11:00 – 11:15 Coffee Break

Wednesday – September 16, Morning

Hall I

11:15 – 13:00 **Topical Session**

SECTION 1. Electrical and optical discharges, elementary and near-electrode processes

11:15 – 11:40

1.03 ELECTRICAL, THERMAL AND RESOURCE CHARACTERISTICS OF THE ARC PLASMA TORCH FOR STEAM HEATING
A. Anshakov, E. Urbakh, A. Urbakh, V. Faleev

11:40 – 12:05

1.04 THE NEW CONCEPT OF EFFICIENT WATER PLASMA GENERATORS
L. Charakhovski, A. R. Marquesi, C. Otani, G.Petraconi Filho, I. Khvedchyn, V. Sauchyn, R. Bicudo, A.S. da Silva Sobrinho, M. Massi, H.S. Maciel, A. Halinouski

12:05 – 12:20

1.05 NANOSECOND DIFFUSE DISCHARGES INITIATED BY RUNAWAY ELECTRONS IN PULSED-PERIODIC MODE IN DIFFERENT GASES AT ATMOSPHERIC PRESSURE
M. Erofeev, M. Shulepov, V. Tarasenko

12:15 – 12:30

1.06 THE EFFECT OF PH ON THE YIELDS OF THE OH RADICALS IN AQUEOUS SOLUTIONS BY GLOW DISCHARGE
A. Khlyustova, V. Titov, Yu. Marfin

12:30 – 12:45

1.07 MONTE CARLO SIMULATION OF A BEAM RELAXATION IN A NEGATIVE GLOW OF A GLOW DISCHARGE
V. Pinaev

12:45 – 13:00

1.08 EXPERIMENTAL DETERMINATION OF BOHM COEFFICIENTS FOR CYLINDRICAL AND PLANE LANGMUIR PROBES
V. Riaby and P. Masherov

13:00 – 14:00 Lunch

Wednesday – September 16, Morning

Hall II

11:15 – 13:00 **Topical Session**

SECTION 2. Transport, optical, and thermodynamic properties of plasma

11:15 – 11:30

2.03 THE CALCULATIONS OF THERMOPHYSICAL PROPERTIES OF Fe AND Ni PLASMAS
E. Apfelbaum

11:30 – 11:45

2.04 COMPUTER ANALYSIS OF TRANSPORT, OPTICAL, AND THERMODYNAMIC PROPERTIES OF PLASMA
V. Kuzenov, S. Ryzhkov, V. Shumaev

11:45 – 12:00

2.05 MEASURING AND ANALYSIS OF OPTICAL SPECTRA OF MICROPLASMA DISCHARGES INITIATED BY PLASMA FLOW ON SURFACE OF METAL SAMPLES
A.A. Letunov, V.A. Ivanov, M.E. Konyzhev, T.I. Kamolova, A.M. Zimin, V.I. Troynov

12:00 – 12:15

2.06 PMMA SHOCK COMPRESSION UP TO 0.6 TPA
V. Ternovoi, D. Nikolaev, I. Lomonosov

12:15 – 12:30

2.07 DATA REGISTRATION AND ANALYSIS SYSTEM OF THE GR-1 PLASMA CHEMICAL REACTOR
D. V. Malakhov, V. D. Stepakhin, I. G. Ryabikina, N. N. Skvortsova, N. K. Kharchev, A. A. Letunov, L. V. Kolik, and G.V. Ukryukov

12:30 – 12:45

2.08 NUMERICAL MODEL OF NONLINEAR ABSOLUTE PARAMETRIC INSTABILITY IN AN INHOMOGENEOUS PLASMA
E.Z. Gusakov, L.V. Simonchik, A.V. Tomov, F.M. Trukhachev

12:45 – 13:00

2.09 THE TEMPERATURE MEASUREMENT OF GYROTRON DISCHARGES IN POWDERS MIXTURES OF BORON-CONTAINING DIELECTRICS WITH METALS
A. Letunov, N.Kharchev, I.Ryabikina, N.Skvortsova, A.Sokolov

13:00 – 14:00 Lunch

Wednesday – September 16, Afternoon

Hall I

14:00 – 16:15 **Topical Session**

SECTION 5. Plasma applications

14:00 – 14:25

5.10 PLASMA APLICATION IN WOOD PROCESSING
G. Volokitin, N. Skripnikova, O. Volokitin, V. Shekhovtsov

14:25 – 14:50

5.11 PHENOMENOLOGICAL MODEL OF WETTING CHARGED DIELECTRIC SURFACES AND ITS TESTING WITH PLASMA – TREATED POLYMER FILMS AND INFLATABLE BALLOONS
E. Bormashenko, V. Multanen, G. Chaniel, R. Grynyov, E. Shulzinger, R. Pogreb, G. Whyman

14:50 – 15:15

5.12 INACTIVATION OF CONSORTIUM OF MICROORGANISMS BY ATMOSPHERIC PRESSURE AIR PLASMA JET
V.I. Apkhipenko, A.A. Kirillov, A.V. Paulava, L.V. Simonchik, N.V. Dudchik, O.E. Nezhvinskaya, S.A. Yanetskaya, M.M. Kuraica, B.M. Obradovic

15:15 – 15:30

5.14 COMPARATIVE STUDY ON THE EFFECT OF RF AND DBD PLASMA TREATMENT ON PHOTOCATALYTIC ACTIVITY OF ZNO-BASED CATALYSTS
Savastenko N., Filatova I.I., Chubrik N.I., Lyushkevich V.A., Goncharik S.V., Astreiko V.M.

15:30 – 15:45

5.15 PULSE PLASMA RADIATION SOURCE FOR BIOMEDICAL INVESTIGATION
I. Piskarev, O. Burhina, I. Ivanova

15:45 – 16:00

5.16 GERMINATION IMPROVEMENT AND DISINFECTION OF PLANT SEEDS BY COLD PLASMA AND ELECTROMAGNETIC FIELD TREATMENTS
I. Filatova, V. Azharonok, V. Lyushkevich, G. Gadzhieva, A. Zhukovsky, V. Mildaziene, V. Snieskiene, A.Stankeviciene, G. Pauzaite, R. Zukiene

16:00 – 16:15

5.17 INTERACTION OF MOULD FUNGI WITH NANOSTRUCTURAL METALLIC COATINGS OBTAINED BY VACUUM-ARC DEPOSITION
I.A.Gontcharova, A.A Arashkova., I.L.Pobol, I.P.Smyaglikov, A.G.Denigenko, V.N.Kokhniuk

16:15 – 16:30 Coffee Break

Wednesday – September 16, Afternoon

Hall II

14:00 – 16:15 **Topical Session**

SECTION 4. Non-ideal and dusty plasmas

14:00 – 14:20

4.03 CHARGING OF DUST PARTICLES BY ELECTRON BEAMS WITH ENERGY 10-30 KEV
L.G. Dyachkov, V.M. Chepelev, O.A. Chernukha, O.F. Petrov

14:20 – 14:40

4.04 OBTAINING OF PARTICLES AND MATERIALS WITH NANOSTRUCTURED SURFACES IN THE COMPLEX PLASMA
M.K. Dosbolayev, A.U. Utegenov, T.S. Ramazanov, M.T. Gabdullin, I.I. Filatova, V.V.Azharonok

14:40 – 15:00

4.05 MODIFICATION OF DUST PARTICLES IN PLASMA
V.Yu. Karasev, E.S., Dzlieva, V.A. Polischuk, A.P. Gorbenko, S.I. Pavlov, M.M. Makar, M.A. Ermolenko

15:00 – 15:15

4.06 THE METHOD FOR SYNTHESIS OF SMALL DISPERSE PARTICLES IN COMBINED ARC AND RF DISCHARGES
D.G. Batryshev, T.S. Ramazanov, M.K. Dosbolayev, M.T. Gabdullin, Ye. Yerlanuly

15:15 – 15:30

4.07 PHENOMENA IN COMPLEX (DUSTY) PLASMA STUDIED UNDER MICROGRAVITY CONDITIONS
V. I. Molotkov, A. M. Lipaev, D. I. Zhukhovitskii, V. N. Naumkin, V. E. Fortov, O. F. Petrov, S. A. Khrapak

15:30 – 15:45

4.08 STRUCTURE TRANSFORMATIONS IN CRYOGENIC DUSTY PLASMA
S. Antipov, M. Vasiliev, O. Petrov

15:45 – 16:00

4.09 MODULATION OF DISSIPATIVE DUST-ION ACOUSTIC WAVE IN DUSTY PLASMA
Alinejad Hassan

16:00 – 16:15

4.10 CHARGING PROCESSES OF THE DUST PARTICLES IN PLASMA TAKING INTO ACCOUNT EMISSION OF ELECTRON
S. Molkov, V. Savin

16:15 – 16:30 Coffee Break

Wednesday – September 16, Afternoon

Hall III

16:30 – 18:00 **Poster Sessions**

SECTION 1. Electrical and optical discharges, near-electrode processes

1.09 MODELING THE RF CAPACITIVE DISCHARGE IN THE MIXTURE OF INERT GASES AND CHLORINE
A. Golovitskii, A. Pelli

1.10 PLASMA GENERATION IN THE DISCHARGE WITH A LARGE VOLUME HOLLOW CATHODE
T. Koval, I. Lopatin, Nguyen Bao Hung

1.11 NON-THERMAL PLASMA JET GENERATED BY DIELECTRIC BARRIER DISCHARGE IN ATMOSPHERIC PRESSURE ARGON
Yu.Akishev, A.Balakirev, V.Karalnik, M.Medvedev, A.Petryakov, N.Trushkin, A. Shafikov

1.12 A ROLE OF THIN CURRENT FILAMENTS IN A PLASMA SHEET FORMATION IN PIN-TO-PLANE SURFACE DBD IN ARGON
Yu.Akishev, G.Aponin, M.Grushin, V.Karalnik, A.Petryakov, N.Trushkin

1.13 THE NUMERICAL CALCULATION OF THE PARAMETERS OF THE GLOW DISCHARGE IN THE ACOUSTIC FIELDS
A.I. Saifutdinov, N.F. Kashapov, S.A. Fadeev

1.14 QUALITATIVE MODEL OF ION CHARGE TRANSFER ON NON-THERMIONIC CATHODES IN VACUUM ARC
V. P. Polistchook

1.15 GENERATION OF GUIDED STREAMERS IN A HELIUM FLOW WITH GAS IMPURITIES
M. Pinchuk, A. Kudryavtsev, O. Stepanova, D. Subbotin

1.16 HIGH CURRENT DISCHARGE IN HIGH PRESSURE HYDROGEN
M.E. Pinchuk, A.A. Bogomaz, A.V. Budin, A.G. Leks

1.17 THE STUDY OF GAS DISCGARGE WITH LIQUID ELECTROLIYTE CATHODE IN TERMS OF UNCOVERING ITS CURRENT-CARRYING ELECTRODE
G. Tazmeev, B. Timerkaev, Kh. Tazmeev

1.18 CHARACTERISTICS OF SELF-SUSTAINED VOLUME DISCHARGE IN c-C_4F_8
A.A. Belevtsev, K.N. Firsov, S.Yu. Kazantsev, I.G. Kononov, S.V. Podlesnykh

1.19 CURRENT-PRESSURE DEPENDENCIES OF DC MAGNETRON DISCHARGE
A.N. Ryabinkin, Yu. A. Mankelevich, A.F. Pal, A.O. Serov

1.20 PLASMA GLOW INTENSITY AND TARGET EROSION DEPTH DISTRIBUTIONS IN MAGNETRON SPUTTER
A.O. Serov , Yu. A. Mankelevich, A.F. Pal, A.N. Ryabinkin

1.21 DISTRIBUTION OF IONIC CURRENT FORMED BY DBSD IN A THREE ELECTRODE SYSTEM OVER THE GROUNDED THIRD ELECTRODE SURFACE FOR AN IMPULSE OR AN A.C. HIGH VOLTAGE APPLIED TO THE SD ELECTRODE
A. Lazukin, A. Nikitin, M. Sokolova, S. Krivov, I. Rebrov,S. Nebogatkin, M. Malashin

1.22 RESEARCH OF INFLUENCE TEMPERATURE OF THE ELECTROLYTIC CATHODE ON THE INITIATION GAS DISCHARGE
Kashapov L.N., Kashapov N.F., Kashapov R.N.

1.23 STUDY OF RADIAL DISTRIBUTION OF HELIUM ARC PLASMA PARAMETERS AT ATMOSPHERIC PRESSURE
A. Ageev, D. Kavyrshin, O. Korshunov, M. Sargsyan, V. Chinnov

1.24 PECULIARITIES OF ACTIVE POWER OF VOLUME-SURFACE DISCHARGE IN A TREE-ELECTRODE SYSTEM IN AIR
A. Lazukin, M. Sokolova, A. Nikitin, S. Krivov, I. Rebrov, S. Nebogatkin, M. Malashin

1.25 COLD FLOWING PLASMA WITH RF OF Ar
M. Tanışlı, N. Şahin, S. Mertadam, S. Demir, T. Akan and E. İlik

1.26 CAPACITIVE RF DISCHARGE AND POST-DISCHARGE OF Ne
M. Tanışlı, N. Şahin, S. Mertadam, S. Demir

1.27 MODELING OF EMISSION CHARACTERISTICS OF XeCl EXCILAMPS EXCITED BY BARRIER DISCHARGE
S. Anufrik, A. Volodenkov, K. Znosko

1.28 INVESTIGATION OF THE STABILITY OF MICROWAVE DISCHARGE IN OXYGEN IN A RESONATOR TYPE PLASMATRON
Bordusau S.V., Madveika S.I., Lushakova M.S.

1.29 STEPWISE IONIZATION OF GAS DISCHARGE PLASMA OF INERT GASES
B.M.Smirnov, V.P.Afanas'ev, D.A.Zhilyaev

1.30 ABOUT SOLVING SOME NONLINEAR PROBLEMS OF LOW-TEMPERATURE PLASMA
V. S. Zeltukhin, V. Ju. Chebakova

1.31 ON THE INCREASE IN THE LIMITING CURRENT OF AN ATMOSPHERIC-PRESSURE GLOW DISCHARGE IN AN ARGON FLOW
B. B. Baldanov, Ts. V. Ranzhurov

1.32 ON THE SPATIAL DISTRIBUTION OF ELECTRONS IN LOCALIZED GAS DISCHARGE
A. Abramov, E. Pankratova, V. Nazarov

1.33 THE ROLE OF THE ANODE PROCESSES IN A SPHERICAL GLOW DISCHARGE
V. Zhovtyansky, O. Anisimova, V. Nazarenko, R. Syrotyuk

1.34 KINETIC MODEL AND NUMERICAL SOLUTION OF PARAMETERS IN THE OUTER REGION OF A MULTICATHODE SPOT VACUUM ARC
D.F. Devia, E. Restrepo P, S. Ramirez, D. Sabogal and J.D. Alzate

1.35 NUMERICAL ANALYSIS OF FORMATION OF HEXAGONAL AND BAND STRUCTURES IN THE GAS DISCHARGE-SEMICONDUCTOR SYSTEM
Ismail Rafatov

1.36 COMPUTER SIMULATION OF PLASMODYNAMIC PROCESSES IN CAPILLARY DISCHARGES
Kuzenov V.V., Ryzhkov S.V., Gavrilova A.Yu., Skorokhod E.P.

1.37 ON THE MORPHOLOGY OF THE DESTRUCTION OF ALKALI HALIDE SINGLE CRYSTALS OF OPTICAL DISCHARGE
Chumakov A.N., Piatrenka A.M., Bosak N.A.

Wednesday – September 16, Afternoon

Hall III

16:30 – 18:00 **Poster Sessions**

SECTION 2. Transport, optical, and thermodynamic properties of plasma

2.10 THE INFLUENCE OF AMBIPOLAR FIELD ON EDF FORMATION AND CORRESPONDING INTEGRAL PLASMA CHARACTERISTICS
M. Krasilnikov, A. Kudryavtsev

2.11 USING OPTICAL ACTINOMETER FOR WATER MICROLEAKAGES DIAGNOSTICS IN GLOW DISCHARGE WITH THE HOLLOW CATHODE
A. Bernatskiy

2.12 CALCULATION OF ELECTRONIC AND GAS TEMPERATURES IN THE NON-CONDUCTING ZONE OF THE HIGH-CURRENT ELECTRICAL ARC
A. Gerasimov, A. Kirpichnikov

2.13 GEODESIC ACOUSTIC MODE'S EVOLUTION IN REGIMES WITH IMPURITIES PUFFING ON T-10 TOKAMAK
V. Zenin, G. Subbotin, L. Klyuchnikov

2.14 1D DIFFUSION OF PARTICLE VELOCITY
V. Gorin

2.15 IRREGULARS OF THE ELENBAAS-HELLER EQUATION SOLUTION FOR FREE BURNING ELECTRIC ARC
V. Zhovtyansky, Yu. Lelyukh, P. Porytsky, Ya. Tkachenko, Yu. Honcharuk

2.16 PLASMA SPECTROSCOPY OF FREE-BURNING ELECTRIC ARC BETWEEN COMPOSITES Ag-Ni/Mn-Ni ELECTRODES
A.N. Veklich, M.M. Kleshich, V.V. Vashchenko, I.O. Kuzminska

2.17 SPECTROSCOPY INVESTIGATION OF THE UNDERWATER DISCHARGE BETWEEN MANGANESE GRANULES
K. Lopatko, Y. Aftandiliants, A. Veklich, V. Boretskij, V. Ivachev

2.18 SPATIAL AND TEMPORARY CHARACTERISTICS OF AN EROSIVE LASER PLUME OF A GRAPHITE TARGET IN VACUUM
V.K. Goncharov, R.R.Ismailov, M.V. Puzyrev

2.19 THERMOCHEMISTRY MODELING OF HYDROGEN AND WATER INFLUENCE ON C_{20} CAGE DECAY
N.A. Poklonski, S.V. Ratkevich, S.A. Vyrko, A.T. Vlassov

2.20 THE MULTIBAND HIGH-RESOLUTION SPECTROMETER FOR THE ITER CXRS DIAGNOSTIC SYSTEM
N. Naumenko

2.21 STRAGGLING IN DEGENERATE TWO-COMPONENT PLASMAS
Yu.V. Arkhipov, A.B. Ashikbayeva, A. Askaruly, L.T. Yerimbetova, A.E. Davletov, and I.M. Tkachenko

2.22 EQUATION-OF-STATE MODEL FOR METALS AT HIGH TEMPERATURES AND PRESSURES
K. V. Khishchenko

2.23 QUANTUM-STATISTICAL CALCULATIONS OF THERMODYNAMIC PROPERTIES OF HYDROCARBONS AT HIGH ENERGY DENSITIES
M. A. Kadatskiy, K. V. Khishchenko

2.24 MONTE CARLO SIMULATION OF ION TRANSPORT THROUGH DISCHARGE SHEATH
S. A. Maiorov, R. I. Golyatina, S. K. Kodanova, T. S. Ramazanov

2.25 PROPERTIES OF ELECTRIC POTENTIAL IN TOROIDAL PLASMAS
A. Melnikov

2.26 GENERATION OF SOLITARY WAVE BY TRAPPED PARTICLE NONLINEARITY IN VLASOV PLASMA
Debraj Mandal, Devendra Sharma

19:00 – 21:30 Ballet Performance

Thursday – September 17, Morning

Hall I

9:00 – 11:15 **Topical Session**

SECTION 5. Plasma applications

9:00 – 9:25

5.13 A NOVEL TECHNIQUE FOR FABRICATION OF NANOFLUIDIC DEVICES WITH POLYMER FILM FORMED BY PLASMA POLYMERIZATION
L. Kravets, A. Gilman, M. Yablokov, V. Satulu, B. Mitu, G. Dinescu

9:25 – 9:45

5.20 ELECTRON-BEAM PLASMA TECHNOLOGIES FOR BIOACTIVE TITANIUM OXIDES PRODUCTION
T. Vasilieva, S. Lysenko, A. Sigarev, I. Sokolov

9:45 – 10:00

5.21 ON THE ESTIMATION OF THE PARAMETERS OF THE STRONG FLAT SHOCK WAVES INDUCED BY PULSED ELECTRIC DISCHARGES WITHIN A MEDIUM WITH NON-LINEAR THERMAL CONDUCTIVITY
Yu. Grishin, A. Skryabin

10:00 – 10:15

5.22 MICROPLASMAS IN LIQUIDS: APPLICATIONS FOR NANOMATERIALS SYNTHESIS
V. Burakov, M. Nedelko, A. Nevar, V. Kiris, N. Tarasenko

10:15 – 10:30

5.30 SMALL SIZED RAILGUN AS A EFFECTIVE SOURCE OF PLASMA JETS AND STRONG SHOCK WAVE GENERATOR
S.A. Poniaev, B.G. Zhukov, R.O. Kurakin. B.I. Reznikov, V.A. Sakharov, A.I. Sedov, Yu.A. Shustrov, S.V. Bobashev

10:30 – 10:45

5.47 ORGANIC WASTE GASIFICATION IN ELECTRIC ARC PLASMA REACTOR
A. Liavonchyk, V. Sauchyn, I. Khvedchyn, H. Dalholenka

10:45 – 11:00

5.26 DIELECTRIC BARRIER DISCHARGE FOR MOLECULES DISSOCIATION IN PLASMA CHEMICAL REACTOR
V. Khomich, V. Malanichev, M. Malashin, S. Moshkunov

11:00 – 11:30 Coffee Break

Thursday – September 17, Morning

Hall III

11:30 – 13:00 **Poster Session**

SECTION 4. Non-ideal and dusty plasma

4.11 MEASUREMENT OF THE CHARGE OF A SINGLE DUST PARTICLE
L. Deputatova, V. Filinov, D. Lapitsky, V. Pecherkin, R. Syrovatka, L. Vasilyak, V. Vladimirov

4.12 INVESTIGATIONS ON THE DUST PARTICLE REMOVAL FROM AN AIR FLOW BY THE ALTERNATING ELECTRIC FIELD OF A QUADRUPOLE TYPE
D.S. Lapitsky, V.S. Filinov, V.I. Vladimirov, R.A. Syrovatka, L.M. Vasilyak, L.V. Deputatova, V.Ya. Pecherkin

4.13 INVESTIGATION OF PLASMA LUMINESCENCE INTENSITY NEAR THE DUST PARTICLES IN DC GLOW DISCHARGE IN A MIXTURE OF ARGON AND HELIUM
A. Kostenko

4.14 DYNAMICS OF DUST STRUCTURE FORMED IN THE AREA OF NARROWING CURRENT CHANNEL IN THE MAGNETIC FIELD
E. Dzlieva, M. Ermolenko, V. Karasev, S. Pavlov

4.15 FRACTAL STRUCTURE AND PROPERTIES OF MICROPARTICLES FROM THE PLASMA ARC
N.A.Smolanov, V.A Neverov

4.16 DYNAMICS OF DUST STRUCTURES IN THE GLOW DISCHARGE IN HELIUM-XENON MIXTURE IN THE MAGNETIC FIELD
E.S. Dzlieva, M.A. Ermolenko, L.A. Novikov, S.I. Pavlov, V.Yu. Karasev, S.A. Mayorov

4.17 QUANTUM EFFECTS IN PARTIALLY IONIZED HYDROGEN PLASMAS
Mazhit Zara

4.18 CHARGED MICROPARTICLE REMOVAL FROM GAS FLOW BY DYNAMIC ELECTRIC FIELDS
D. S. Lapitsky, R. A. Syrovatka, V.S. Filinov, V. I. Vladimirov, L. M. Vasilyak, L. V. Deputatova, V. Ya. Pecherkin

4.19 MECHANISM OF OWN ROTATION OF THE DUST PARTICLES
L. A. Novikov, V. Yu. Karasev, M. A. Ermolenko, E. S. Dzlieva, S. I. Pavlov

4.20 CLUSTERS OF THE CHARGED DUST PARTICLES IN A MAGNETIC TRAP AT CRYOGENIC TEMPERATURES
M.M. Vasiliev, I.A. Michurina O.F., Petrov and K.B. Stacenko

4.21 DUST PARTICLE CHARGING WITH ACCOUNT OF POLARIZATION EFFECTS
A.E. Davletov, Ye.S. Mukhametkarimov, A. Kissan

Thursday – September 17, Morning

Hall III

11:30 – 13:00 **Poster Session**

SECTION 5. Plasma applications

5.18 SURFACE COLOR CENTERS GENERATED WITH IONIZING RADIATION AND PLASMA IN LITHIUM FLUORIDE
A. P. Voitovich, V. S. Kalinov, A. P. Stupak, A. N. Novikov, L. P. Runets, L. V. Simonchik, Y. A. Safronau

5.51 INFLUENCE OF GAS-DISCHARGE PLASMA ON CONDUCTIVITY OF ZINC OXIDE NANORODS
G. Pashkevich, P. Ropot, V. Ulianova, A. Zazerin

5.52 MEASUREMENTS OF THRUST OF PULSE LASER MICROTHRUSTER AT REDUCED AIR PRESSURE
P.V. Chekan, P.I. Verenich, V.V. Shkurko

5.53 ETHANOL CONVERSION ASSISTED BY DC ATMOSPHERIC PRESSURE DISCHARGE
V.I. Arkhipenko, A.A. Kirillov, L.V. Simonchik, A.V. Paulava, A.P. Chernukho, A.N. Migoun

5.54 INVESTIGATION OF THE O-MODE ANOMALOUS ABSORPTION IN THE UH RESONANCE
V.I. Arkhipenko, E.Z. Gusakov, L.V. Simonchik, E.V. Sysoeva, M.S. Usachonak

5.55 OXIDATION RESISTANCE OF THE SURFACE LAYERS IN THE Nb/Ti SYSTEM TREATED BY COMPRESSION PLASMA FLOWS
V. Shymanski, N. Cherenda, V. Uglov, V. Astashynski, A. Kuzmitski

5.56 OPTICAL PROBE MEASUREMENTS OF ABLATION PLASMA PLUMES SPEED
A.N. Chumakov, P.V. Chekan, P.I. Verenich.

5.57 FORMATION OF CATHODE SURFACE OF STRAW TUBE IONIZING RADIATION DETECTORS BY LASER ABLATION
A.N. Chumakov, L.E. Batay, N.A. Bosak, N.A. Kuchinskiy, V.A. Chekhovsky

5.58 EFFICIENCY OF SILICON LASER ABLATION IN THE AIR AT BICHROMATIC PULSE IRRADIATION
A. N. Chumakov, N. A. Bosak, P. I. Verenich

5.59 CORRELATION OF ADHESIVE, CONTACT, AND ELECTRET PROPERTIES OF DC DISCHARGE-MODIFIED POLYTETRAFLUOROETHYLENE FILMS
M. Yablokov, A. Gilman, M. Piskarev, A. Kechekyan, A. Kuznetsov

5.60 PLASMA AND LASER INDUCED MODIFICATION OF NANOPARTICLES IN SOLUTIONS
V.S. Burakov, A.V. Butsen, N.V. Tarasenko,V.V. Pankov, N.N. Tarasenka, F. Krcma

5.61 LIBS CHARACTERIZATION OF IN-DEPTH COMPOSITION OF THERMAL SPRAY COATINGS MODIFIED BY COMPRESSION PLASMA FLOWS
V. Astashinsky, E. Ershov-Pavlov, V. Kiris, V. Okovity,
N. Tarasenko, V. Uglov

5.62 APPLICATION OF LIBS FOR ANALYSIS OF NANOPARTICLES IN SOLUTIONS
V.S.Burakov, V.V.Kiris, N.V.Tarasenko

5.63 RESEARCH INTO FRICTION AND WEAR OF POWDER COATINGS PRODUCED BY USING HIGH-ENERGY PULSED FLOWS
A.F. Ilyushchenko, A.I. Shevtsov, V.M. Astashynski, A.M. Kuzmitski, G.F. Gromyko, A.N. Chumakov, N.A. Bosak, K.V. Buikus

5.64 INFLUENCE OF Si CONTENT ON MECHANICAL PROPERTIES OF (Ti,Zr)1-xSixN MAGNETRON SPUTTERED FILMS
I.A. Saladukhin, G. Abadias, V.V. Uglov, S.V. Zlotski

5.65 THE SURFACE MODIFICATION OF TITANIUM AND ALUMINUM ALLOYS BY ELECTROLYTE PLASMA TREATMENT
S.I. Bahayeu, A.A. Parshuto, I.P. Smyaglikov

5.66 LIGHT-EMITTING N-RICH SILICON NITRIDE FILMS DEPOSITED BY PLASMA-ENHANCED AND LOW-PRESSURE CVD
I. Parkhomenko, F. Komarov, L. Vlasukova, O. Milchanin, A. Mudryi, V. Zhyvulka, J. Żuk, P. Kopyciński

5.67 SYNTHESIS OF MYLTI-LAEYER GRAPHENE SHEETS AND CARBON NANOTUBES USING A PLASMA TORCH
R. Amirov, M. Shavelkina, N. Alihanov

5.68 THE MEASUREMENTS OF THE ELECTRON TEMPERATURE IN THE NEGATIVE GLOW PLASMA USING WALL PROBE IN DETECTORS PLES
Saifutdinov A.I., Sysoev S.S., Kudryavtasev A.A., Pramatarov P., Stefanova M.

5.69 BACTERICIDAL COMPONENTS OF ATMOSPHERIC PRESSURE PLASMA JETS
V.I. Arkhipenko, A.A. Kirillov, A.V. Paulava, L.V. Simonchik, G.B. Sretenovic, I.B. Krstic, B.M. Obradovic, M.M. Kuraica

5.70 IR DIAGNOSTICS OF DIELECTRIC BARRIER DISCHARGE IN CONTACT WITH WATER
B.M. Obradovic, V.V. Kovacevic, G.B. Sretenovic,V.I.Arkhipenko, A.A. Kirillov, A.V. Paulava, L.V. Simonchik,M. M. Kuraica

5.72 NUMERICAL STUDY ON HEATING GAS IN ATMOSPHERIC PRESSURE HELIUM DISCHARGE
V. Bekasov, G. Kirsanov, S. Eliseev, O. Stepanova

5.73 RESEARCH OF INFLUENCE TEMPERATURE OF THE ELECTROLYTIC CATHODE ON THE INITIATION GAS DISCHARGE
Denisov D.G., Kashapov N.F., Kashapov R.N.

5.74 THE DEPENDENCE OF THE TRANSIENT PROCESSES OF PLASMA ELECTROLYTIC PROCESSING FROM THE APPLIED VOLTAGE
Kashapov N.F., Kashapov R.N., Semyshin V.D.

5.75 SYNTHESIS OF SILICON OXIDE NANOWIRES BY GAS-JET ELECTRON BEAM PLASMA CVD METHOD
E.A. Baranov, S.Ya. Khmel A.O. Zamchiy

5.76 INACTIVATION OF MICROORGANISMS IN COLD ARGON PLASMA AT THE ATMOSPHERIC PRESSURE
B. B. Baldanov, Ts. V. Ranzhurov, S. V. Gomboeva

5.77 EFFECT OF PLASMA NON-EQUILIBRIUM ON HEAT FLUXES IN HIGH-SPEED FLOW
D.A. Bogdanov, E. A. Kuznetsov, S.A. Poniaev

5.78 OBLIQUE ION-ACOUSIC SOLITONS IN SUPERTHERMAL PLASMA
Annou Karima

5.79 COAL AND SEWAGE SLUDGE GASIFICATION BASED ON THE NEW GENERATION ICP/RF PLASMA
I. Matveev

5.80 SYNTHESIS AND MODIFICATION OF NANOPARTICLES IN ELECTRICAL DISCHARGE PLASMA IN LIQUIDS
V.S. Burakov, V.V. Kiris, M.I.Nedelko, A.A.Nevar, N.V.Tarasenko

5.81 INFLUENCE OF AIR CARBON DIOXIDE ON CARBON DETECTION IN LOW ALLOY STEEL BY LASER INDUCED BREAKDOWN SPECTROSCOPY METHODS
K.Yu.Catsalap, E.A.Ershov-Pavlov, L.K. Stanchits

5.82 STRUCTURE AND PHASE TRANSFORMATION OF ELECTROCHEMICAL COMPOSITES OF (NICKEL-BORON) h-BN BORON NITRIDE SYSTEM UNDER NITROGEN ION IMPLANTATION
A.M. Kuzey, V.A. Filimonov, S.V. Yakubovskaya

5.83 PLASMA HYDROPHILIZE OF CARBON RIBBON TO CREATE COMPOSITE MATERIALS WITH HIGH STRENGTH CHARACTERISTICS
A. Garifullin, I. Abdullin, K. Galyamova, E. Skidchenko

5.24 CO_2-REFORMING OF METHANE BY DIELECTRIC BARRIER DISCHARGE
M. Pinchuk, D.Subbotin, O. Stepanova, V. Popov, V. Spodobin

13:00 – 14:00 Lunch

Thursday – September 17, Afternoon

Hall I

14:00 – 16:00 **Plenary Sessions**

14:00 – 14:45

1. **Petrov O.F.**

   QUASI-2D PHASE TRANSITIONS IN PLASMA-DUST SYSTEMS

14:45 – 15:30

2. **van der Mullen Jan-Joseph**

   CHARACTERIZATION OF HIGH-TECH PLASMAS: THE KEY-ROLE OF THOMSON SCATTERING

15:30 – 15:55

3. **Paskalov G.**

   RF PLASMA PROCESSING OF BIOMATERIALS

15:55 – 16:15

4. **Kalitukho I., Protasenya A.**

   LASER EXCITATION SOURCES AND DIVERSE SPECTROMETERS RANGE FOR PLASMA ANALYSIS AND OTHER APPLICATIONS

16:15 – 16:30 Coffee Break

Hall I

16:30 – 17:00 **Closing Ceremony**

Friday – September 18

Excursions, Post Symposium tours

SCHEDULE OF THE PPPT-8 CONFERENCE

Start Time	Monday September 14 7:00 – 22:00	Tuesday September 15	Wednesday September 16	Thursday September 17	Friday September 18
9:00 09:30 - 10:00 10:00 - 10:45	Arrival, registration, sightseeing tour of Minsk	Opening Ceremony Plenary Session (Hall I)	Plenary Session (Hall I)	Topical Session: Section 5 (Hall I)	Excursions, Post Symposium tours
10:45 - 11:00		Coffee Break	Coffee Break	Coffee Break	
11:00 - 13:00		Plenary Session (Hall I)	Topical Sessions: Section 1 (Hall I) Sections 2 (Hall II)	Poster Session Sections 4, 5 (Hall III)	
13:00 – 14:00		Lunch	Lunch	Lunch	
14:00 – 16:15		Topical Sessions: Section 5 (Hall I) Section 3 (Hall II)	Topical Sessions: Section 5 (Hall I) Section 4 (Hall II)	Plenary Session (Hall I)	
16:15 - 16:30		Coffee Break	Coffee Break	Coffee Break	
16:30 - 18:00		Poster Session Sections 3, 5 (Hall III)	Poster Session Sections 1, 2 (Hall III)	Closing Ceremony (Hall I)	
18:30 – 21:30		Welcome Party	Ballet Performance		

ФИЗИКА ПЛАЗМЫ И ПЛАЗМЕННЫЕ ТЕХНОЛОГИИ

VIII Международная конференция
Минск, Беларусь, 14 – 18 сентября 2015 г.

Программа конференции

На английском языке

Ответственный за выпуск В.П. Кузьмин

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