

October 23, 2024 <i>14-30 p.m. EEST</i>	Opening Ceremony & Plenary Session (Chairman: Andrii Netreba) 14:30 <i>Opening Ceremony</i> 14:40 A FAMOUS UKRAINIAN PHYSICIST NAUM DAVYDOVYCH MORGULIS <i>Igor Anisimov</i> 15:20 FEATURES OF PLASMA-SURFACE INTERACTION AT EXTREME OF PARTICLES AND ENERGY LOADS <i>Vadym Makhlai</i> 16:00 X-RAY PHOTOELECTRON SPECTROSCOPY: TOWARDS ASSESSING NANOINTERFACES <i>Olexandr Bondarchuk</i>
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October 24, 2024 <i>14-30 p.m. EEST</i>	(PTA) - Polarimetry: Theory and Applications (Chairman: Serhii Savenkov) 1. MODERNIZATION OF RADAR SYSTEMS BASED ON METAMATERIALS <i>S. O. Remez, O. M. Ivanuta</i> 2. POLARIMETRIC CLEAR-SKY MEASUREMENTS WITH 555 nm IMAGING POLARIMETER <i>Syniavskyi I., Sosonkin M., Ivanov Yu., Danylevsky V., Milinevsky G., Osypenko R. Oberemok Ye.</i> 3. TUNABLE CONTROLLERS OF LIGHT POLARIZATION'S DEGREE <i>Kolomiets O., Savenkov S., Oberemok Ye., Kolomiets I., Syniavsky I., Ivanov Yu.</i> 4. COMPARISON OF POLARIMETRIC ANALYSIS METHODS OF ANISOTROPIC AND DEPOLARIZING PROPERTIES OF MEDIA <i>Fesenko A., Savenkov S.</i> 5. REDUCTION CONTROL OF FLUID STRUCTURE DISORDER DEGREE BY CRYOELECTRONICS METHODS <i>T. I. Biriukov, O. M. Ivanyuta</i> (PP) - Plasma Physics (day 1) (Chairman: Anatoliy Veklych) 1. PECULIARITIES OF NON-EQUILIBRIUM OF DYNAMIC PLASMA-CHEMICAL SYSTEMS <i>Valeriy Chernyak, Daniil Tretiakov, Vitalii Iukhymenko, Sergey Shulga, Volodymyr Trachevskiy, Volodymyr Kyslyi, Oleksandr Kolomys,</i>
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Kostiantyn Iukhymenko, Olexander Tsymbaliuk, Sergei Nedovesov

2. THE PHYSICAL MODEL OF THE SYNTHESIS OF OPTICALLY ACTIVE SUBSTANCES IN DYNAMIC PLASMA-CHEMICAL SYSTEMS *D.D. Tretiakov, V.Ya. Chernyak, V.V. Iukhymenko, K.V. Iukhymenko, O.M. Tsymbaliuk S.V. Shulga, S.S. Nedovesov*
3. CHARACTERISTICS OF A SECONDARY DISCHARGES PLASMA SUPPORTED BY A GLIDING ROTATING DISCHARGES *V.Ya. Chernyak, V.V. Iukhymenko, O.O. Zavajenko, S.S. Nedovesov, D.D. Tretiakov, K.V. Iukhymenko, O.M. Tsymbaliuk*
4. ION FLUX SOURCE BASED ON A NON-SELF-SUSTAINED ARC DISCHARGE IN A LONGITUDINAL MAGNETIC FIELD *S. M. Gubarev, V.O. Khomych, A.V. Ryabtsev*
5. INFLUENCE OF GAS PRESSURE ON THE GROWS OF CLUSTERS IN MAGNETRON DISCHARGE *Bibik A., Demeshko O., Kravchenko O..*
6. PLASMA DIAGNOSTICS OF MAGNETRON DISCHARGE WITH COPPER AND MOLYBDENUM VAPOURS ADMIXTURES *A. Murmantsev, A. Veklich, O. Kostyukevych, M. Papizh, A. Monastyrov*
7. SPATIAL DISTRIBUTION OF ELECTRIC FIELD IN A TWO STAGE HALL TYPE PLASMA SOURCE *V.Yu. Bazhenov, A.M. Dobrovolskii, V.V. Tsiolko, V.M. Piun*
8. *POWER DISTRIBUTION IN THE TWO STAGE HALL TYPE PLASMA SOURCE* *V.Yu. Bazhenov, A.M. Dobrovolskii, V.V. Tsiolko, V.M. Piun*
9. ELECTRON SOURCE BASED ON EMERGENCE OF SELF-INJECTED ELECTRON BUNCH AT PLASMA WAKEFIELD EXCITATION BY A TW LASER PULSE *D. S. Bondar, V. I. Maslov, I. N. Onishchenko*
10. MODELLING OF ARGON-ACETYLENE PLASMA WITH DUST PARTICLES IN THE AFTERGLOW REGIME *I.B. Denysenko, V.V. Vinnichenko*

11. ANALYSIS OF THE IONIZATION REGION OF A MAGNETRON DISCHARGE IN ARGON WITH COPPER VAPOR USING A GLOBAL MODEL *I.B. Denysenko, O.Y. Kravchenko, A.N. Veklich*

12. CHARACTERISTICS OF PULSED GAS DISCHARGE REACTOR FOR SYNTHESIS THIN FILMS OF TUNGSTEN AND ITS OXIDE *M.M. Feldiy, O.K. Shuaibov, O.Y. Minya, R.V. Hrytsak, A.O. Malinina, Y.Y. Bilak, M.O. Margitych, V.M. Krasyllynets*

(REC) - Radio Engineering and Communications (day1)
(Chairman: Mykhailo Kononov)

1. C-BAND METEOROLOGICAL RADAR ANTENNA. DESIGN, CALCULATIONS AND THE FIRST MEASUREMENTS *V. Glamazdin, M. Natarov, O. Shubnyi, A. Mogyla.*

2. EFFECT OF A SOLAR ECLIPSE ON GNSS RADIO SIGNALS *L. F. Chernogor, Y. B. Mylovanov, V. L. Dorokhov, A. M. Tsymbal*

3. GLOBAL VARIATIONS OF THE GEOMAGNETIC EFFECT DURING THE OCTOBER 14, 2023 ANNULAR SOLAR ECLIPSE IN THE AMERICAS *L. F. Chernogor, M. Yu. Holub, V. T. Rozumenko*

4. THE IMPACT OF IONOSPHERIC WEATHER ON GNSS RADIO SYSTEMS *L. F. Chernogor, M. Yu. Tkachenko*

5. FEATURES OF THE GEOMAGNETIC EFFECT CAUSED BY THE SOLAR ECLIPSE ON APRIL 8, 2024 IN THE AMERICAN REGION *L. F. Chernogor, M. Yu. Holub*

6. VARIATIONS OF IONOSPHERIC WEATHER DURING GEOSPACE STORM ON MAY 10–11, 2024. *L. F. Chernogor, V. O. Bessarabova*

7. THE INFLUENCE OF LITHOSPHERE PROCESSES ON THE PARAMETERS OF THE ATMOSPHERIC AND IONOSPHERIC RADIO COMMUNICATION CHANNEL *I. G. Zakharov, L. F. Chernogor*

8. DIFFRACTION RADIATION OSCYLLATOR FOR TERAHERTZ FREQUENCIES *Miroshnichenko V.S.,*

Senkevych O.B.

9. DETERMINING THE DISTANCE TO A TARGET USING PASSIVE RADAR OVER THE SEA SURFACE *Mytsenko I.M., Roenko A.N.*

10. THE INFLUENCE OF VOLCANISM ON THE PARAMETERS OF THE ATMOSPHERIC RADIO COMMUNICATION CHANNEL *Chernogor L.F., Liashchuk O.I., Shevelev M.B., Tilichenko N.M.*

11. IONOSPHERIC EFFECTS OF STRONG ATMOSPHERIC PROCESS ON HF RADIO WAVE PROPAGATION CHARACTERISTICS *L.F. Chernogor, Yi-yang Luo, K.P. Garmash, Qiang Guo, Yu Zheng*

12. POLARIZATION-SPECTRAL SIGNATURES OF SIGNALS SCATTERED BY SURFACE OBJECTS IN THE CENTIMETER AND MILLIMETER WAVE RANGE *Yi-yang Luo, V.I. Lutsenko, I.V. Lutsenko, O.V. Soboliak, S.O. Masalov*

13. USING DIELECTRIC COATINGS IN MILLIMETER AND SUBMILLIMETER WAVE DEVICES TO INCREASE GENERATION POWER *Yi-yang Luo, O.V. Kryvenko, V.I. Lutsenko, S. O. Masalov*

14. CORRELATION OF SPECTRAL COMPONENTS OF INTERFERENCE TO ACTIVE-PASSIVE DECAMETER RANGE RADIO SYSTEMS FROM HF BROADCASTING STATIONS *Yi-yang Luo, V.I. Lutsenko, I.V. Lutsenko, O.V. Soboliak, Nguyen Xuan Anh*

15. MONITORING RESPIRATORY DISEASES BY ACOUSTIC NOISE *Yi-yang Luo, Yehor Kryvenko, Olena Kryvenko, Vladyslav Lutsenko, Sergyi Masalov*

(PS) - Physics of Semiconductors and Dielectrics, Semiconductor's Devices (day 1) (Chairman: Valeriy Skryshevskyy)

1. INVESTIGATION OF THE MECHANISM OF ELECTRICAL CONDUCTIVITY IN LEAD ZIRCONATE TITANATE FERROELECTRIC CERAMICS IN THE LOW FREQUENCY REGION *Lushchin S.P.*

2. A NEW POSSIBLE TYPE OF THE RESONANT-

TUNNELING DIODE ON THE BASE OF 2D CHANNEL WITH A POTENTIAL WELL AND BARRIERS, CREATED BY DOPING WITH A POLARIZATION FIELD OF A MULTI-DOMAIN FERROELECTRIC *M.V. Strikha A.M. Morozovska*

3. EFFECT OF OXYGEN DOPING ON THE PHASE TRANSITION TEMPERATURE OF CuInP2S6 CRYSTALS *Alexander Molnar, Dávid Gál , Henrietta Bán*
4. X-RAY AND THERMOLUMINESCENCE OF GLASSY LI2B4O7:Gd AND LIB3O5:Gd *V.M. Krasyllynets, V.M. Holovey, I.I. Chychura*
5. FEATURES OF LOW-TEMPERATURE TRANSPORT PROPERTIES IN Co/Al2O3, Co/SiO2 and Co/TiO2 GRANULAR NANOCOMPOSITES *O.E. Baibara, Y.A. Stelmakh, L.A. Krushinskaya, A.I. Ievtushenko*
6. INFLUENCE OF THE PIEZOELECTRIC EFFECT ON THE Si-O-Gd CATHODE WORK FUNCTION. *M.I. Fedorchenko, O.I. Gudymenko, P.M. Lytvyn*
7. THE INFLUENCE OF THE ULTRA-SMALL CONCENTRATIONS OF FERROELECTRIC NANOPARTICLES ON THE IONIC TRANSPORT IN LIQUID CRYSTALS *Juliya M. Gudenko, Oleksandr S. Pylypchuk, Igor A. Gvozдовskyy, Serhii E. Ivanchenko, Volodymir M. Poroshin*
8. PREPARATION OF POLYVINYL CHLORIDE/OXIDIZED ACTIVATED CARBON THIN-FILM COMPOSITES AND THEIR MICROWAVE ABSORPTION PROPERTIES *D.O. Zhytnyk, I.P. Matushko, Yu.V. Noskov, V.A. Moiseienko, O.V. Mischanchuk L.M. Grishchenko*

(CT) Computer Technologies (Chairman: Yuriy Boyko)

1. CAN ARTIFICIAL INTELLIGENCE REPLACE IT SPECIALISTS? *Pavlo Bachysh*
2. AI INTERTITLE TRANSLATE TOOL: OLD MOVIES, NOWADAYS OPPORTUNITY *Andrii Chuian*
3. POWER PROFILING OF FPGA EDGE COMPUTING SYSTEM AS A STAGE OF CI/CD PROCESS *Oleksandr*

Hryshchuk, Sergiy Zagorodnyuk

4. CROSS-SITE REQUEST FORGERY: MODERN PREVENTION TECHNIQUES *Studennykov V. D.*
5. APPLICATION OF DEEPLABV3+ NEURAL NETWORK ARCHITECTURE FOR DRIVABLE ZONE SEGMENTATION IN ROAD IMAGES *Matus Volodymyr, Andriy Konovalov*
6. MONITORING THE FUNCTIONAL AND PSYCHO-EMOTIONAL STATE OF MILITARY PERSONNEL IN COMBAT CONDITIONS: AN INNOVATIVE APPROACH TO ECG ANALYSIS *Mykhailo Bocharov, Illya Chaikovsky*
7. THE DEVELOPMENT OF AN INFORMATION-ANALYTICAL SYSTEM FOR MANAGING FINANCIAL CONTRIBUTIONS TO CHARITY BASED ON WEB TECHNOLOGIES *Hlobina Anastasiia*
8. SYNTHETIC MEDIA: WHAT IT IS AND HOW IT IS CREATED – AN OVERVIEW *Bohdan Karlash, Yuriy Boyko*
9. INCREASING SECURITY AND RELIABILITY OF LOCKCHAIN SYSTEMS USING MATHEMATICAL MODELING *O.M. Liubymenko, A.O. Popova, N.O. Maslova, O.A. Shtepa*

(SP) - Surface Physics, Nano- and Microelectronics (day 1)
(Chairman: Andrii Horyachko)

1. STUDY OF THE QUANTUM EFFICIENCY OF RADIATION AND PHYSICAL PROPERTIES OF HETEROLAYERS BASED ON CADMIUM TELLURIDE OBTAINED BY THE ISOVALENT SUBSTITUTION METHOD *Mazur T.M., Mateik G.D.*
2. PHOTON DRAG EFFECT AND ITS INFLUENCE ON THE OPTICAL, ELECTRICAL AND MAGNETIC CHARACTERISTICS OF NANOFILMS *Krupa M.M.*
3. MICROWAVE PROPERTIES OF COMPOSITE BASED ON POLYURETHANE AND CARBON NANOTUBES *O.M. Gonchar, V.A. Moiseienko, L.M. Grishchenko*
4. SIZE EFFECT ON ELECTROPHYSICAL PARAMETERS OF Fe/SiO₂ (MgO OR HfO₂) DISCONTINUOUS

MULTILAYERS *Panchoshnyi O., Pazukha I., Vinnichenko Yu., Pylypenko O., Shkurdoda Yu*

5. IMPORTANCE OF THE SURFACE FOR THE MANIFESTATION OF ELECTROMAGNETIC PROPERTIES OF NANOPOWDERS *Lina Sartinska, Vladimir Trachevsky, Igor Vorona*

6. CALCULATION OF RADIO-OPTICAL PARAMETERS OF Fe / Gd₂O₃ FILM NANOSTRUCTURES IN THE DECIMETER RANGE *K.A. Korotkov, V. V. Netyaga*

7. SIZE EFFECTS IN THE ELECTRICAL CONDUCTIVITY OF ISLAND AND DISCONTINUOUS MULTILAYER STRUCTURES BASED ON FeNi and SiO_x *Dolhov-Hordiichuk S., Pazukha I., Horoviy R., Pylypenko O., Shkurdoda Yu.*

8. ON THE CORRELATION BETWEEN ELECTRONIC AND MECHANICAL PROPERTIES OF PHOSPHORENE *A. G. Solomenko, T. M. Radchenko, V. A. Tatarenko*

9. SPR EFFECT IN THIN FILMS OF HIGH-CONDUCTIVE METALS *A.I. Biletskiy O.L. Kukla, O.N. Fedchenko*

October 25, 2024 <i>12-30 p.m. EEST</i>	(MP) - Medical Physics (Chairman: Serhii Radchenko) 1. EFFECT OF MAGNETIC FIELD ON PHOTODISCITATION OF OXYHEMOGLOBIN UNDER THE INFLUENCE OF LASER RADIATION WITH A WAVELENGTH OF 605 NM <i>O. Ostapenko, O Salyuk, D. Velyhotskyi, S. Mamilov.</i> 2. SPATIAL ATTENTION MODULE IN AUTOENCODER FOR DENOISING BIOMEDICAL VISUALIZATIONS <i>Sliusarenko Denys, Netreba Andrii</i> 3. MICROWAVE PROPERTIES OF COMPOSITE FILMS BASED ON POLYVINYL CHLORIDE AND BROMINATED ACTIVATED CARBON <i>Illia A. Metelskyi*, Dmytro O. Zhytnyk, Igor P. Matushko, Yuriy V. Noskov, Vladyslav A. Moiseienko, Liudmyla M. Grishchenko</i> 4. QUANTUM-CHEMICAL AND SPECTRAL ANALYSIS OF ATP/AMP MOLECULES CONFORMERS IN WATER SURROUND <i>Yu.G. Terentieva, I.M. Dmitruk, K.O. Maiko, A.M. Rashevskya, Ye.Yu. Stepanenko</i> 5. STAFFING CRISIS IN RADIATION ONCOLOGY OR WHERE TO GET MEDICAL PHYSICISTS? <i>V. Vashchyshyn</i> 6. NON-INVASIVE BLOOD GLUCOSE MEASUREMENT USING MACHINE LEARNING <i>Serhiy Duha, Volodymyr Chuchkanov, Dmytro Velyhotskyi, Serhii Mamilov</i> 7. BIOLOGICAL TISSUE BOUNDARIES CONTRAST RESTORATION BY RELAXATION CHARACTERISTICS IN MRI <i>Komarov A. O., Netreba A. V.</i> 8. RECONSTRUCTION OF MAGNETIC RESONANCE IMAGES USING MULTIPLE PERIODOGRAM METHODS <i>Mamotenko S. P., Netreba A. V.</i> (LPO) - Laser Physics and Optoelectronics (Chairman: Volodymyr Ovechko) 1. DIELECTRIC LASER ACCELERATION OF NON-RELATIVISTIC ELECTRONS ON TRANSPARENT AND REFLECTIVE PERIODIC CHIP-STRUCTURES <i>Ihor Beznosenko, Andrii Vasyliiev, Gennadiy Sotnikov, Serhii Kovalov, Gennadiy Krivonosov, Roman Kniaziev</i>
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2. ENHANCED PRISM-COUPLED CHIRAL SENSING WITH PLASMONIC GRATINGS *O. Demianyk, S. Polevoy, V. Tuz, O. Yermakov*
3. MODELING AND OPTIMIZATION OF OPTOELECTRONIC SENSORS *Okhrimchuk O.B., Verbytskyi V.G.*
4. REACTIVE SINTERING OF TRANSPARENT YAG:Sm³⁺ CERAMICS: EFFECT OF STARTING ALUMINA NANOPOWDERS *Anton Balabanov, Ihor Vorona, Oksana Matvienko, Arsenii Tymoshenko, Serhii Parkhomenko Olexander Budnikov, Olexander Tolmachev, Roman Yavetskiy*
5. INVESTIGATION OF SELF-ACTION MANIFESTATION OF SUDAN 3 AND SUDAN 4 BASED PMMA COMPOSITES *Labunets A.R., Ronkovych A.V., Ilchenko S.G. , Komarenko D.O., Ovdenko V.M.*
6. ENGINEERING OF PLASMONIC ANISOTROPIC NANOPATCH-BASED METASURFACES *Hrinchenko A., Polevoy S., Demianyk O., Yermakov O.*
7. ABSORPTION SPECTRA OF CHALCOGENIDE SEMICONDUCTORS DOPED WITH ERBIUM *O.V. Machulianskyi, V.V. Buteiets*
8. IMPACT OF NITROGEN ATOM ON NLO SELF-ACTION EFFECT MANIFESTATION OF NAPHTHOL-CONTAINING AZOMETHINES INCORPORATED INTO PMMA MATRIX *Ronkovych A.V., Labunets A.R., Ilchenko S.G., Komarenko D.O., Ovdenko V.M.*

(REC) - Radio Engineering and Communications (day2)
(Chairman: Mykhailo Kononov)

1. MICROSTRIP SUPERCONDUCTING RESONATOR WITH A NONLINEAR LUMPED ELEMENT IN THE FORM OF A CONSTRICTION *O.A. Kalenyuk, S.I. Futimsky, A.P. Shapovalov,*
2. MULTY FREQUENCY REMOTE SENSING SURFACE OF WATER AND OIL FILMS IN CRITICALLY SMALL SIZED TANK *Uzlenkov A. Lyubitsky A.*
3. BIPOLAR LC-OSCILLATOR AS AMPLITUDE AND

FREQUENCY MODULATOR *Bohdanov R. V.*

4. MEASURING THE LEVEL OF HIGH-TEMPERATURE OBJECTS BY ACOUSTIC LOCATION METHOD *A. V. Odnovol*
5. SOFTWARE-DEFINED RADIO RECEIVING SYSTEM FOR PASSIVE HF DOPPLER RADAR FOR MULTIPLE PATH MULTI-FREQUENCY AND FREQUENCY-AND-ANGULAR PROBING TRAVELING IONOSPHERIC DISTURBANCES *K.P. Garmash*
6. COMBINED RADAR METER OF ACTUAL SPEED AND SLIPPAGE OF AGRICULTURAL VEHICLES *Maltsev V. P.*
7. FEATURES OF THE FORMALIZATION OF SITUATION MANAGEMENT CYCLES OF THE GROUND SPECIALIZED COMPLEX OF RADIO ELECTRONIC COUNTERMEASURES FOR SMALL DRONES *V. Kantsedal*
8. STUDY ON EXTRACTION OF MILLIMETER-WAVELENGTH RADIO EMISSION FROM A RELATIVISTIC MAGNETRON *A.B. Batrakov, S.I. Fedotov, O.M. Lebedenko, V.S. Mukhin, I.N. Onishchenko, O.L. Rak, A.O. Shtanko, V.G. Sinitsin, M.V. Volovenko*
9. THE INCLUSION OF A QUARTZ RESONATOR IN POWERFUL AUTOGENERATORS *Dmytro Chernov, Vladimir Krizhanovski*
10. THE IMPACT OF IONOSPHERIC DISTURBANCES ON DECAMETER RADIO WAVE TRAJECTORIES *L. F. Chernogor, V. F. Pushin, Y. H. Zhdanko*
11. ANALYSIS OF THE OUTPUT SIGNAL AND RANDOM DRIFT CHARACTERISTICS OF A HOMOGENEOUS MEMS GYROSCOPE ARRAY *R. Andriichuk, V. Boretskij*
12. GLOBAL VARIATIONS OF THE GEOMAGNETIC FIELD DURING EXTREME GEOSPACE STORM ON MAY 10–11, 2024 *Chernogor L.F., Shevelev M.B.*
13. CLASSIFICATION OF AIR QUALITY IN KYIV DURING PERIODS OF HIGH POLLUTION LEVELS *A. Antonenko, V. Boretskij, O. Zagaria*

14. ANALYSIS OF THE OUTPUT SIGNAL AND RANDOM
DRIFT CHARACTERISTICS OF A HOMOGENEOUS
MEMS GYROSCOPE ARRAY *R. Andriichuk, V. Boretskij*

**(PS) - Physics of Semiconductors and Dielectrics,
Semiconductor's Devices (day 2) (Chairman: Valeriy
Skryshevskyy)**

1. ELECTRONIC STRUCTURE OF THE NI:ZNS SOLID
SOLUTIONS *S.V. Syrotyuk, A.Y. Nakonechnyi, Y.V. Klysko*
2. OLED ON QUANTUM WELLS *Nataliia Kuzyk, Pavlo
Stakhira, Volodymyr Fitio*
3. APPLICATION OF CONCENTRATED SOLAR RADIATION
FOR GROWING OF ZnO-Zn MICRO - AND
NANOSTRUCTURES *Y.O. Kovalskyi, V. A. Karpyna, O.I.
Olifan, S. P. Starik, D.S. Kamenskyh A. I. Ievtushenko*
4. JOSEPHSON JUNCTIONS WITH A METAL-DOPED
SEMICONDUCTOR BARRIER. *V.E. Shaternik, V.L. Makivska*
5. CONDUCTIVITY AND DEEP LEVELS IN GeSn FILM
*Kondratenko S.V., Datsenko O.I., Pocherpailo A.A., Kovanzhi
P.O.*
6. TRANSPORT OF CURRENT CARRIERS IN LEAD
TELLURIDE FILMS *Mazur M.P., Mazur M.-Y. M.*
7. WAYS TO INCREASE THE EFFICIENCY OF LOW-
TEMPERATURE HEAT PIPES AS AUTONOMOUS HEAT
SOURCES *Mazur T.M., Vashchyshak I.R.*

**(SP) - Surface Physics, Nano- and Microelectronics (day 2)
(Chairman: Andrii Horyachko)**

1. LASER DESORPTION/IONIZATION MASS
SPECTROMETRIC STUDY OF COMPOSITES BASED ON
TRANSITION METAL DICHALCOGENIDES AND
ORGANIC COMPOUNDS *Kosevich M.V., Boryak O.A.,
Shelkovsky V.S., Zobnina V.G., Kuzema P.O., Karachevtsev
V.A.*
2. ASPECTS OF ELECTRONIC STRUCTURE OF
HYDROXYPYROMORPHITE SURFACE -
 $\text{Pb}_{10}(\text{PO}_4)_6(\text{OH})_2$ *S. S. Smolyak, N. A. Kurgan, I. V.*

Sukhenko, V. L. Karbivskyy

3. In₂-ySnyO₃ AS TRANSPARENT SUPERCONDUCTOR: ELECTROCHEMICAL REDUCTION METOD *Menesenko D., Feia O., Makivska V., Shapovalov A.*
4. LEED APPLICATIONS IN COMPLEX AND NON-IDEAL SURFACE STRUCTURES *A.G. Fedorus, A.M. Goriachko, D.V. Rumiantsev*
5. AUTOMATED TEMPERATURE CONTROL SYSTEM FOR HOT ISOSTATIC PRESSING EQUIPMENT *Yurii Skirta, Dmytro Velyhotskyi, Serhii Mamilov, Alexandr Tovstolytkin*
6. OPTICAL ABSORPTION OF THE KBI(MOO₄)₂/PHOSPHATE-MOLYBDATE GLASS CERAMICS *A. Oliinyk, V. Borysiuk, Yu. Hizhnyi, S.G. Nedilko*
7. SCANNING TUNNELING MICROSCOPY OF METALLIC AND SEMICONDUCTING SURFACES WITH ATOMIC RESOLUTION *Vlad Rozhenko, Andrii Goriachko*

(PP) - Plasma Physics (day2) (Chairman: Anatoliy Veklych)

1. STUDY OF ELECTRODYNAMICS' CHARACTERISTICS OF GAS DISCHARGE IN A NEEDLE-PLANE SYSTEM WITH ONE LIQUID ELECTRODE *I.N. Onishchenko., G.V. Taran, O.O. Zamuriev, P.O. Opaliev*
2. STUDY OF THE IGNITION VOLTAGE OF A NEGATIVE PULSED CORONA DISCHARGE WITH COMBINED POWER SUPPLY *G. V. Taran, B.B. Kadolin, I.N. Onishchenko*
3. INITIAL STAGE OF ELECTROMAGNETIC BEAM INTERACTION WITH DENSE PLASMA: CHARGE SEPARATION AND LANGMUIR WAVE DYNAMICS *B.R. Mykhailenko, I.O. Anisimov*
4. TURBULENT ELECTRON MOTION AND DENSITY EVOLUTION IN ELECTROMAGNETIC BEAM-PLASMA INTERACTIONS *B.R. Mykhailenko, I.O. Anisimov*
5. EVALUATION OF THE ELECTRON ENERGY DISTRIBUTION FUNCTION IN THE TWO STAGE HALL TYPE PLASMA SOURCE *V.Yu. Bazhenov, A.M. Dobrovolskii,*

V.V. Tsiolko, V.M. Piun

6. PULSED ELECTRON BEAM PROCESSING OF MATERIAL SURFACES USING THE ACCELERATOR WITH A PLASMA OPENING SWITCH *D.V. Vinnikov, I.N. Onishchenko, V.B. Yuferov, O.M. Ozerov, V.V. Katrechko, V.I. Tkachov, A.B. Batrakov.*
7. QUASI-MONOCHROMATIC WAVES EXCITED BY HIGH VOLTAGE UNIPOLAR PULSES IN A COAXIAL TRANSMISSION LINE WITH INSERTS LIKE FERRITE RINGS AND A METAL GRATING *A.B. Batrakov*, S.Yu. Karelin, O.M. Lebedenko, V.S. Mukhin, I.N. Onishchenko, O.L. Rak, V.G. Sinitsin, M.V. Volovenko*
8. SOURCE OF POWERFUL X-RAY RADIATION BASED ON HIGH CURRENT PULSED ELECTRON ACCELERATOR "TEMP-B" *O.B. Batrakov, I.N. Onishchenko, S.I. Fedotov, E.G. Hlushko, A.O. Zinchenko*
9. DYNAMICS OF SPACE CHARGE WAVES IN THE AMPLIFICATION SECTION OF A SUPERHETERODYNE FEL WITH A QUASI-ELECTROSTATIC FIELD *Stanislav Ilin, Alexander Lysenko*
10. NUMERICAL STUDY OF HEAT FLUX TO A SPHERICAL PARTICLE IN ATMOSPHERIC-PRESSURE ARGON PLASMA *D. V. Antoniy, A. I. Momot, I. V. Krivitsun*
11. CALCULATION OF EQUILIBRIUM PLASMA COMPOSITION BASED ON OPTICAL EMISSION SPECTROSCOPY OF ELECTRIC DISCHARGE PLASMA *E. Sorokun, I. Slisarenko, A. Murmantsev, V. Osidach, A. Veklich*

(PM) - Physics of Magnetism (Chairman: Ivan Yastremsky)

1. FIRST-PRINCIPLES STUDY OF MAGNETIC GROUND STATES OF A COPPER-LEAD APATITE SERIES *I. V. Sukhenko, V. L. Karbivskyy, N. K. Kurgan*
2. BLOCH POINT SINGULARITY STRUCTURE *Ivan A. Yastremsky*
3. TEMPERATURE CHANGES IN MAGNETIC PROPERTIES OF Al-SUBSTITUTED YTTRIUM IRON GARNETS

	<i>Vladyslav Borynskyi, Dariia Popadiuk, Anatolii Kravets, Yuliia Shlapa, Serhii Solopan, Vladislav Korenivski, Anatolii Belous, Alexandr Tovstolytkin</i> 4. DYNAMICS OF MAGNETIC FLUXONS IN A SUPERCONDUCTING MoRe FILM <i>Martynenko I., Kalenyuk O.A., Kasatkin O. L.</i> (MAP) - Mathematical Problems of Applied Physics (Chairman: Andrii Netreba) 1. MONO-FRACTAL ANALYSIS WITH THE HURST DIMENSION USAGE IN APPLIED PHYSICS <i>Leonid F. Chernogor*, Oleg V. Lazorenko**, Andriy A. Onishchenko</i> 2. ADVANCED EXPERT EVALUATION OF INVESTMENT PROJECTS BY METHODS OF FUZZY MULTIPLE THEORIES <i>M.V. Maksyuta, D.T. Nidzelsky, V.V. Obukhovsky</i> 3. SOLVING TOMOGRAPHY PROBLEMS IN THE INFORMATION SPACE OF POSSIBLE SOLUTIONS <i>Sergiy I. Melnyk, Sergiy M. Labazov, Serhii S. Melnyk</i> 4. STUDY OF SPONTANEOUS RADIATION DURING CHANNELING OF LOW-RELATIVISTIC ELECTRONS IN THE MAIN PLANES OF A FLUORITE CRYSTAL <i>M.V. Maksyuta, A.O. Stakhova, V.I. Vysotskii, S.V. Efimenko</i> 5. FEATURES OF CHANNELING POSITIVELY CHARGED PARTICLES ALONG PYRAMIDAL DIRECTIONS IN HEXAGONAL CRYSTALS <i>M.V. Maksyuta, V.I. Vysotskii, D.M. Maksyuta, S.V. Efimenko</i> 6. MATHEMATICAL SIMULATION OF CANTELEVER BENDING DURING INTERACTION WITH HYDROGEN <i>O.M. Liubymenko</i>
October 25, 2024 <i>16-00 p.m. EEST</i>	<i>Closing Ceremony (Chairman: Andrii Netreba)</i>

