

GENERAL INFORMATION

NANO MEETING-2017 is an International Conference traditionally held each two years in Minsk, Belarus. The Conference has arisen from the Belarusian-French initiative and purposes to bring together scientists and engineers from around the world, who work in the fast-developing areas of nanoscience, nanotechnology, nanostructure based electronics and optoelectronics. The meeting addresses the latest results achieved in fabrication, study and application of nanosize structures. It will be in May 30 – June 2, 2017 at the Belarusian State University of Informatics and Radioelectronics in Minsk.

Registration

The registration fee is 150 EURO. It is paid in cash in EURO or equivalently in Belarusian rubles during the registration. The fee includes a copy of the Conference Proceedings, admission to all sessions, coffee breaks, and the city sightseeing bus tour.

Attendees are checked-in at the Conference Registration Desk in the lobby of the second floor of the Building № 1 (P. Browka Str. 6) of the Belarusian State University of Informatics and Radioelectronics. It is easily reached from the subway station “Akademiya Nauk” or by bus number 100 (see the city map at the back cover of the Program). The registration starts on May 30 (Tuesday) at 8:30.

Meeting Activities

The technical program includes invited talks, oral presentations and poster session. Two special sessions namely “Frontiers of Molecular Diagnostics with Nanostructures”, “Nanoelectromagnetics” are organized during the Conference.

All presentations will be in English in the Conference Hall (Building № 1, room 229) and Workshop Room (Building № 1, room 232) of the Belarusian State University of Informatics and Radioelectronics. Oral presentations should be no longer than 30 min for invited speakers and 20 min for others including 3-5 min for questions and short discussion. Audio-visual equipment is available for speakers.

The poster session will take place in the lobby nearby the Conference Hall on Wednesday, May 31. Posters may be prepared in any form and will be displayed on poster boards of 1 m × 1.5 m. All posters should be put up on the boards in the morning May 31. That day authors are requested to be present at their posters starting from 17:00. Informal comments and discussion are encouraged during the session.

On May 30 (Tuesday), the Conference participants are invited to the city sightseeing tour just after finishing of the evening session. Conference Banquet is planned to be on June 1 (Thursday).

For further information contact:

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GENERAL SCHEDULE

Tuesday May 30, 2017, Conference Hall

09:00 – 11:00	PLENARY SESSION
11:00 – 11:20	<i>Coffee Break</i>
11:20 – 13:00	PHYSICS OF NANOSTRUCTURES
13:00 – 14:30	<i>Lunch</i>
14:30 – 16:30	PHYSICS OF NANOSTRUCTURES
16:30 – 16:50	<i>Coffee Break</i>
16:50 – 18:10	PHYSICS OF NANOSTRUCTURES
18:20 – 20:00	<i>City Sightseeing Bus Tour</i>

Wednesday May 31, 2017

	<i>Conference Hall</i>		<i>Workshop Room</i>
09:00 – 10:10	FRONTIERS OF MOLECULAR DIAGNOSTICS WITH NANOSTRUCTURES	09:00 – 10:10	NANOELECTROMAGNETICS
10:10 – 10:30	<i>Coffee Break</i>	10:10 – 10:30	<i>Coffee Break</i>
10:30 – 12:00	FRONTIERS OF MOLECULAR DIAGNOSTICS WITH NANOSTRUCTURES	10:40 – 11:20	NANOELECTROMAGNETICS
	Conference Hall		
12:00 – 14:00	<i>Lunch</i>		
14:00 – 15:40	CHEMISTRY OF NANOSTRUCTURES		
15:40 – 16:00	<i>Coffee Break</i>		
16:00 – 17:00	CHEMISTRY OF NANOSTRUCTURES		
17:00 – 18:30	Poster Session		

Thursday June 1, 2017, Conference Hall

09:00 – 11:10	NANOTECHNOLOGY
11:10 – 11:30	<i>Coffee Break</i>
11:30 – 12:30	NANOTECHNOLOGY
12:30 – 14:00	<i>Lunch</i>
14:00 – 15:30	NANOTECHNOLOGY
15:50 – 16:10	<i>Coffee Break</i>
16:10 – 17:50	NANOTECHNOLOGY
	<i>Conference Banquet</i>

Friday June 2, 2017, Conference Hall

09:00 – 11:10	NANOSTRUCTURE BASED DEVICES
11:10	GENERAL DISCUSSION AND CLOSING OF THE CONFERENCE

PROGRAM

Tuesday May 30, 2017

PLENARY SESSION

- 9:00 **Welcome to Nanomeeting-2017**
V. A. Bogush (Chairman of the National Organizing Committee, Vice-minister of Education of Belarus)

C. H. Kam (Co-Chairman of the International Organizing Committee, Provost of Nanyang Technological University, Singapore)

M. P. Batura (Rector of Belarusian State University of Informatics and Radioelectronics)
- 9:30 I-1 3D NANOARCHITECTURES IN ENERGY- AND BIO-MEDICAL
invited RESEARCH
S. H. Christiansen
Helmholtz-Zentrum Berlin für Materialien und Energie (HZB), Berlin, Germany
- 10:00 I-2 NANOCRYSTAL OPTOELECTRONICS FOR QUALITY LIGHTING AND
invited VERSATILE LASING
H. V. Demir
Nanyang Technological University, Singapore
Bilkent University, Ankara, Turkey
- 10:30 I-3 COINAGE METAL NANOPARTICLES FOR MOLECULAR DETECTION
invited H. Águas
Universidade NOVA de Lisboa and CEMOP/UNINOVA, Caparica, Portugal

Coffee Break

PHYSICS OF NANOSTRUCTURES

- 11:20 I-4 STRUCTURAL CHARACTERIZATION OF Si-BASED NANOWIRE AND
invited NANOSHEET BUNDLES
P. Yuan¹, K. Sasaki², M. Nakayama², Y. Kumazawa², K. Hikichi²,
H. Tatsuoka²
¹*Graduate School of Science and Technology, Shizuoka University, Hamamatsu, Shizuoka, Japan*
²*Graduate School of Integrated Science and Technology, Shizuoka University, Hamamatsu, Shizuoka, Japan*
- 11:50 I-5 MULTIPLE EXCITON GENERATION IN SILICON NANOCRYSTALS
invited I. Marri¹, S. Ossicini², M. Govoni³
¹*CNR-Istituto Nanoscienze, Modena, Italy*
²*University of Modena and Reggio Emilia, Reggio Emilia, Italy*
³*University of Chicago, Chicago, Illinois, USA*
- 12:20 O-1 OPTICAL PROPERTIES OF THE CaSi₂/Si(111) AND Si(111)/CaSi₂/Si(111)
HETEROSTRUCTURES
N. G. Galkin¹, K. N. Galkin¹, A. M. Maslov¹, D. B. Migas², V. O. Bogorodtch²
¹*Institute of Automation and Control Processes, RAS, Vladivostok, Russia*
²*Belarusian State University of Informatics and Radioelectronics, Minsk, Belarus*

12:40 O-2 MEASUREMENTS OF ELECTRICAL PROPERTIES OF NANOSTRUCTURES
W. Nawrocki, M. Maćkowski
Poznan University of Technology, Poznan, Poland

Lunch
PHYSICS OF NANOSTRUCTURES

14:30 I-6 MAGNETOELASTIC INTERACTIONS IN $\text{SrCu}_2(\text{BO}_3)_2$: ORTHOGONAL
invited Cu DIMERS ACTING AS MAGNETIC NANOPANTOGRAPHS
A. Saul
CINaM - CNRS, Marseille, France

15:00 I-7 CONTINUUM MODELING OF THE HETEROEPITAXIAL GROWTH OF
invited SEMICONDUCTOR NANOSTRUCTURES
R. Bergamaschini
University of Milano-Bicocca, Milano, Italy

15:30 O-3 ELECTRONS IN NANOWIRES: FROM BALLISTIC TRANSPORT TO
MAJORANA PHYSICS
D. Grützmacher
Forschungszentrum Juelich, Juelich, Germany

15:50 O-4 BAND GAP CALCULATION OF BULK AND MONOLAYER
TRANSITION METAL DICHALCOGENIDES WITH NEW GVJ-2E
APPROACH WITHIN DFT FRAMEWORK
J. Gusakova¹, B. K. Tay^{1,2}, X. Wang^{1,2}, L. L. Shiau¹, V. E. Gusakov³,
V. E. Borisenko⁴
¹*Novitas Center, Nanyang Technological University, Singapore*
²*CINTRA UMI CNRS/NTU/THALES, Singapore*
³*Scientific-Practical Materials Research Center NASB, Minsk, Belarus*
⁴*Belarusian State University of Informatics and Radioelectronics, Minsk, Belarus*

16:10 O-5 FEATURES OF PLASMON POLARITONS GENERATED IN
ANISOTROPIC MAGNETODIELECTRIC METAMATERIALS
S. N. Kurilkina, V. N. Belyi, N. S. Kazak
B. I. Stepanov Institute of Physics NASB, Minsk, Belarus

Coffee Break

16:50 O-6 THE ADVANCED ANALYSIS OF SLOW NON-STRETCHED
EXPONENTIAL DECAY KINETICS FROM Si NANOCRYSTALS
M. Greben¹, J. Valenta¹, P. Khoroshyy²
¹*Charles University, Prague, Czechia*
²*Institute of Organic Chemistry and Biochemistry, Czech Academy of Sciences, Prague, Czechia*

17:10 O-7 CONTROL OF THE POLARIZATION STATE OF LIGHT BEAMS BY
ANODIC ALUMINUM OXIDE NANOPOROUS FILMS
V. A. Dlugunovich¹, A. Yu. Zhumar¹, N. I. Mukhurov², I. V. Gasenkova²
¹*B. I. Stepanov Institute of Physics NASB, Minsk, Belarus*
²*State Research and Production Association "Optic, Optoelectronic and Laser Technique", Minsk, Belarus*

- 17:30 O-8 CORRELATED DEPHASING IN QUANTUM DOTS
D. S. Mogilevtsev¹, M. V. Korolkov¹, S. B. Cavalcanti²
¹*B. I. Stepanov Institute of Physics NASB, Minsk, Belarus*
²*Instituto de Física, Universidade Federal de Alagoas, Maceió-AL, Brazil*
- 17:50 O-9 ENHANCEMENT OF ABSORPTION CROSS-SECTION AND
LUMINESCENCE YIELD OF SEMICONDUCTOR QUANTUM DOTS
AND UP-CONVERTING PARTICLES
J. Valenta, M. Greben, A. Fucikova
Charles University, Prague, Czechia

City Sightseeing Bus Tour

FRONTIERS OF MOLECULAR DIAGNOSTICS WITH NANOSTRUCTURES

- 9:00 I-8 SINGLE MOLECULE DETECTION AND IMAGING
invited Enzo Di Fabrizio
King Abdullah University of Science and Technology, Thuwal, Saudi Arabia
- 9:30 O-10 APPLICATION OF GOLD NANOPARTICLES IN TOLUENE FOR ART
MATERIALS CHARACTERIZATION BY SURFACE ENHANCED
RAMAN SCATTERING
E. V. Shabunya-Klyachkovskaya, E. V. Korza, L. L. Trotsiuk,
A. S. Matsukovich, O. S. Kulakovich
B. I. Stepanov Institute of Physics NASB, Minsk, Belarus
- 9:50 O-11 STRUCTURE AND SERS ACTIVITY OF GOLD NANOPARTICLES
FORMED BY CHEMICAL DEPOSITION ON POROUS SILICON
S. Zavatski, N. Khinevich, V. Bondarenko
*Belarusian State University of Informatics and Radioelectronics, Minsk,
Belarus*
- Coffee Break**
- 10:30 I-9 SURFACE ENHANCED RAMAN SPECTROSCOPY OF ORGANIC
invited MOLECULES ON METALIZED SILICON NANOSTRUCTURES
H. V. Bandarenka
*Belarusian State University of Informatics and Radioelectronics, Minsk
Belarus*
- 11:00 O-12 ADVANCED SCANNING CONFOCAL RAMAN MICROSCOPE
CONFOTEC® FOR INVESTIGATION OF DIFFERENT
MICRO/NANOSTRUCTURES
S. Shashkov
SOL instruments Ltd., Minsk, Belarus
- 11:20 O-13 MODELLING OF REAL-TIME PHYSICAL AND BIO-NANOSENSORS
FOR MEDICAL APPLICATIONS AND ECOLOGICAL MONITORING
Yu. Shunin^{1,6}, D. Fink², A. Kiv³, A. Mansharipova⁴, R. Muhamediyev⁴,
Yu. Zhukovskii¹, T. Lobanova-Shunina⁵, N. Burlutskaya⁶, V. Gopeyenko⁶,
S. Bellucci⁷
¹*Institute of Solid State Physics, University of Latvia, Riga, Latvia*
²*Universidad Autónoma Metropolitana-Iztapalapa, México, México*
³*Ben-Gurion University, Beer-Sheva, Israel*
⁴*Kazakh-British Technical University, Almaty, Kazakhstan*
⁵*Riga Technical University, Riga, Latvia*
⁶*ISMA University, Riga, Latvia*
⁷*INFN-Laboratori Nazionali di Frascati, Frascati-Rome, Italy*
- 11:40 O-14 SERS-ACTIVE SUBSTRATES BASED ON SILVERED POROUS
SILICON COVERED WITH GRAPHENE
K. Girel, N. Kovalchuk, I. Komissarov, H. Bandarenka
*Belarusian State University of Informatics and Radioelectronics, Minsk,
Belarus*

Lunch

NANOELECTROMAGNETICS

- 9:00 I-10 SINGLE-WALLED CARBON NANOTUBES: FROM SYNTHESIS TO
invited APPLICATIONS
A. Nasibulin
Skolkovo Institute of Science and Technology, Moscow, Russia
- 9:30 O-15 ELECTROPHYSICAL PROPERTIES OF COMPOSITE FILMS BASED ON
GRAPHENE NANOPATELETS COVERED BY METAL
NANOPARTICLES
A. V. Kukhta¹, A. V. Misevich², A. E. Pochtenny²
¹*Institute for Nuclear Problems, Belarusian State University, Minsk, Belarus*
²*Belarusian State Technological University, Minsk, Belarus*
- 9:50 O-16 MICROWAVE-ABSORBING PROPERTIES OF PHOSPHATE
CERAMICS FILLED WITH CARBON NANOTUBES, BaTiO₃ AND Fe₃O₄
K. Piasotski¹, D. Bychanok¹, G. Gorokhov¹, D. Meisak¹, A. Plyushch¹,
P. Kuzhir¹, A. Sokol², K. Lapko², A. Sánchez-Sánchez³, V. Fierro³,
A. Celzard³, C. P. Gallagher⁴, A. P. Hibbins⁴, F. Y. Ogrin⁴, C. Brosseau⁵
¹*Research Institute for Nuclear Problems Belarusian State University, Minsk, Belarus*
²*Research Institute for Physical Chemical Problems of the Belarusian State University, Minsk, Belarus*
³*Institut Jean Lamour, Université de Lorraine - CNRS, Epinal, France*
⁴*University of Exeter, Exeter, United Kingdom*
⁵*Universite Europeenne de Bretagne, Université de Brest, Brest, France*

Coffee Break

- 10:30 I-11 TERAHERTZ AND INFRARED PHOTODETECTORS BASED ON
invited GRAPHENE HETEROSTRUCTURES: CONCEPTS, FEATURES OF
OPERATION AND CHARACTERISTICS
V. Ryzhii¹, T. Otsuji¹, M. Ryzhii², D. Svintsov³, V. Leiman³, V. Mitin⁴,
M. S. Shur⁵
¹*Research Institute of Electrical Communication, Tohoku University, Sendai, Japan*
²*University of Aizu, Aizu-Wakamatsu, Japan*
³*Moscow Institute of Physics and Technology, Dolgoprudny, Russia*
⁴*University at Buffalo, Buffalo, New York, USA*
⁵*Rensselaer Polytechnic Institute, Troy, New York, USA*
- 11:00 O-17 TUNING THz TRANSITIONS IN A QUANTUM RING WITH TWO
GATES
T. P. Collier¹, V. A. Saroka^{1,2}, M. E. Portnoi¹
¹*School of Physics, University of Exeter, Exeter, United Kingdom*
²*Institute for Nuclear Problems, Belarusian State University, Minsk, Belarus*

Lunch

CHEMISTRY OF NANOSTRUCTURES

- 14:00 I-12 QUANTUM DOTS IN ROBUST MATRICES: STATE OF THE ART
invited F. Eichler, C. Guhrenz, A. Benad, M. Adam, N. Gaponik
Technische Universität Dresden, Dresden, Germany
- 14:30 I-13 CERAMICS STRUCTURES, ENERGY AND FRACTALS
invited V. V. Mitić¹, H.-J. Fecht², B. Vlahović³
¹*University of Niš, Niš, Serbia*
Institute of Technical Sciences of Serbian Academy of Sciences, Belgrade, Serbia
²*Institute of Micro and Nanomaterials, University of Ulm, Ulm, Germany*
³*University Research Center for Aerospace Device Research and Education North Carolina Central University*
- 15:00 O-18 ROBUST ELECTRON-NUCLEAR SPIN SYSTEMS NV-¹³C IN DIAMOND FOR QUANTUM TECHNOLOGIES
A. P. Nizovtsev¹, S. Ya. Kilin¹, A. L. Pushkarchuk^{2,4}, V. A. Pushkarchuk³, S. A. Kuten⁴, F. Jelezko⁵
¹*Institute of Physics NASB, Minsk, Belarus*
²*Institute of Physical Organic Chemistry NASB, Minsk, Belarus*
³*Belarusian State University of Informatics and Radioelectronics, Minsk, Belarus*
⁴*Institute for Nuclear Problems, Belarusian State University, Minsk, Belarus*
⁵*Institute for Quantum Optics, Ulm University, Ulm, Germany*
- 15:20 O-19 FLUORESCENT SILVER NANOCCLUSERS IRREVERSIBLY BOUND TO PLASTIC SUBSTRATES
A. A. Gorbachev, T. M. Sheypak, P. P. Pershukevich, O. N. Tretinnikov
B. I. Stepanov Institute of Physics NASB, Minsk, Belarus
- Coffee Break**
- 16:00 O-20 STABLE COLLOIDS THROUGH ULTRASONICATION AND TWO HYDROPHILIC COMPONENT LAYER-BY-LAYER SHELLS
T. G. Shutava, K. S. Livanovich, A. A. Sheremet
Institute of Chemistry of New Materials NASB, Minsk, Belarus
- 16:20 O-21 PHOTOCATALYTICALLY PREPARED Au NANOPARTICLES ON TiO₂ NANOTUBES FOR ELECTROCATALYTIC APPLICATION
H. M. Maltnava, S. K. Poznyak, M. I. Ivanovskaya, T. V. Gaevsckaya
Research Institute for Physical Chemical Problems, Belarusian State University Minsk, Belarus
- 16:40 O-22 PECULIARITIES OF OPTICAL, REDOX AND CATALYTIC PROPERTIES OF NANOSIZED 1D-3D COPPER PARTICLES STABILIZED IN ZSM-5
S. A. Yashnik¹, V. N. Parmon¹, R. Furiga²
¹*Boskov Institute of Catalysis SB RAS, Novosibirsk, Russia*
²*Institute of Coal Chemistry and Material Science, Kemerovo, Russia*

POSTER SESSION

17:00-18:30 – the lobby nearby the Conference Hall

NANOTECHNOLOGY

- 9:00 I-14 CORRELATED EVOLUTION OF SURFACE MORPHOLOGY,
invited STRUCTURE AND MAGNETIC PROPERTIES OF NANOPOROUS Co/Pd
AND Co/Pt FILMS WITH PERPENDICULAR MAGNETIC ANISOTROPY
J. Fedotova¹, J. Kasiuk¹, V. Bayev¹, O. V. Kupreeva², T. N. Anh Nguyen³,
H. M. Do³, D. L. Vu³
¹Institute for Nuclear Problems, Belarusian State University, Minsk, Belarus
²Belarusian State University of Informatics and Radioelectronics, Minsk,
Belarus
³Institute of Materials Science, Vietnam Academy of Science and Technology
Hanoi, Vietnam
- 9:30 I-15 GROWTH AND APPLICATIONS OF MoS₂ FEW-LAYERS
invited X. Wang, Li Lynn Shiau, J. Gusakova, B. K. Tay
CINTRA, Nanyang Technological University,
NOVITAS, School of Electrical and Electronic Engineering,
Nanyang Technological University, Singapore
- 10:00 I-16 ENGINEERING OF MOLYBDENUM DISULPHIDE FOR CATALYTIC
invited HYDROGEN GENERATION
H. Li
Nanyang Technological University, Singapore
- 10:30 O-23 NANOSTRUCTURE ENGINEERING TO TAILOR InAs/InAsSb
SUPERLATTICE FOR MIDWAVE INFRARED BROADBAND
DETECTION
J. P. Perez, Q. Durlin, P. Christol
University Montpellier, IES, Montpellier, France
CNRS, IES, Montpellier, France
- 10:50 O-24 NANOSTRUCTURING OF DIAMOND AND OPTICAL DIFFRACTION
GRID FORMATION BY BORON ION IMPLANTATION
A. L. Stepanov¹, V. I. Nuzdin¹, V. F. Valeev¹, N. V. Kurbatova¹,
M. F. Galyautdinov¹, V. V. Vorobev², Y. N. Osin²
¹Kazan Physical-Technical Institute RAS, Kazan, Russia
²Kazan Federal University, Kazan, Russia
- Coffee Break**
- 11:30 O-25 THE METHOD TO CREATE THE SELF-ORGANIZED
NANOSTRUCTURES BASED ON INDOTRICARBOCYANINE DYE
N. V. Belko¹, M. P. Samtsov¹, G. A. Gusakov¹, E. S. Voropay²
¹A. N. Sevchenko Institute for Applied Physical Problems of the Belarusian
State University, Minsk, Belarus
²Belarusian State University, Minsk, Belarus
- 11:50 O-26 ANALYSIS OF NANOWIRE DIAMETER VARIATION DURING MBE
SELF-CATALYZED GROWTH: A MONTE CARLO SIMULATION
A. Nastovjak¹, A. Suprunets², N. Shwartz^{1,2}
¹A. V. Rzhanov Institute of Semiconductor Physics SB RAS, Novosibirsk,
Russia
²Novosibirsk State Technical University, Novosibirsk, Russia

- 12:10 O-27 MODELING OF FORMATION AND GROWTH OF NANODROPLETS AT HIGH NUCLEATION RATES
S. P. Fisenko¹, A. A. Rostami², D. B. Kane², Y. B. Pithawalla², M. S. El-Shall³
¹*A. V. Luikov Heat & Mass Transfer Institute NASB, Minsk, Belarus*
²*Research, Development & Regulatory Affairs, Altria Client Services LLC, Richmond, Virginia, USA*
³*Virginia Commonwealth University, Richmond, Virginia, USA*

Lunch

- 14:00 I-17 Nanosize clusters in dielectric crystals and their effect on point defects
invited A. P. Voitovich
B. I. Stepanov Institute of Physics, NASB, Minsk, Belarus
- 14:30 O-28 FORMATION OF MONO- AND MULTI-LAYERED FILMS OF LATERALLY ORIENTED SEMICONDUCTOR COLLOIDAL NANOPATELETS
A. Mikhailov¹, G. Isic², S. Askrabic², A. Antanovich¹, A. Prudnikau¹, M. Artemyev¹
¹*Research Institute for Physical Chemical Problems, Belarusian State University, Minsk, Belarus*
²*Institute of Physics Belgrade, University of Belgrade, Belgrade, Serbia*
- 14:50 O-29 XPS STUDY OF GRAPHENE GROWN BY ATMOSPHERIC PRESSURE CVD FROM N-DECANE PRECURSOR WITH NITROGEN AS A CARRIER GAS
N. G. Kovalchuk¹, I. V. Komissarov¹, S. L. Prischepa¹, M. Andrulevicius², A. Lazauskas², S. Tamulevicius²
¹*Belarusian State University of Informatics and Radioelectronics, Minsk, Belarus*
²*Institute of Materials Science, Kaunas University of Technology, Kaunas, Lithuania*
- 15:10 O-30 EXPERIMENTAL EVIDENCE FOR CHEMO-ELECTRONIC CONVERSION OF WATER ADSORPTION ON THE SURFACE OF NANOSIZED YTTRIA-STABILIZED ZIRCONIA
A. Lyubchyk¹, H. Águas¹, E. Fortunato¹, R. Martins¹, O. Lygina², S. Lyubchyk², N. Mohammadi³, E. Lähderanta³, A. S. Doroshkevich⁴, T. Konstantinova⁵, I. Danilenko⁵, O. Gorban⁵, A. Shylo⁵, V. K. Ksenevich⁶, N. A. Poklonski⁶
¹*3N/CENIMAT, Department of Materials Science, Faculty of Science and Technology Universidade NOVA de Lisboa and CEMOP/UNINOVA Campus de Caparica, Caparica, Portugal*
²*LAQV Requite, Department of Chemistry, Faculty of Science and Technology Universidade NOVA de Lisboa, Campus de Caparica, Caparica, Portugal*
³*Lappeenranta University of Technology, Lappeenranta, Finland*
⁴*Joint Institute for Nuclear Research, Dubna, Russia*
⁵*Donetsk Institute for Physics and Engineering NAS of Ukraine, Kyiv, Ukraine*
⁶*Belarusian State University, Minsk, Belarus*

- 15:30 O-31 SYNTHESIS OF ZINC OXIDE NANORODS AND PLATES BY SOLVOTHERMAL METHOD
S. K. Lim¹, S.-H. Hwang¹, J. Jung², M. G. Jeong³
¹Division of Nano and Energy Convergence Research, DGIST, Daegu, Korea
²Korea Textile Development Institute, Daegu, Korea
³UL Chemical Inc., Daegu, Korea

Coffee Break

- 16:10 O-32 INFLUENCE OF Y₂O₃ AND Gd₂O₃ ADDITIVES ON LUMINESCENCE PROPERTIES OF CaO-2SiO₂:Ce GLASSES
Y. U. Tratsiak¹, M. V. Korjik², E. E. Trusova³, M. Fasoli⁴, F. Moretti⁴, A. Vedda⁴
¹Research Institute for Physical Chemical Problems, Belarusian State University, Minsk, Belarus
²Research Institute for Nuclear Problems, Belarusian State University, Minsk, Belarus
³Belarusian Technological State University, Minsk, Belarus
⁴Università di Milano-Bicocca, Milano, Italy
- 16:30 O-33 SURFACE MORPHOLOGY OF GERMANIUM LAYERS ON SILICON SURFACES AT HIGH TEMPERATURES
A. A. ShklyaeV
A. V. RzhanoV Institute of Semiconductor Physics, SB RAS, Novosibirsk, Russia
Novosibirsk State University, Novosibirsk, Russia
- 16:50 O-34 UNIQUE POROUS ALUMINA FORMED IN PHOSPHORIC ACID ELECTROLYTES AT HIGH ANODIC VOLTAGES
X. Huang¹, W. Su¹, L. Sun¹, A. A. Maximenko², M. Marszałek², J. A. Fedotova³, S. K. Lazarouk⁴
¹Hangzhou Dianzi University, Hangzhou, China
²Institute of Nuclear Physics Polish Academy of Sciences, Krakow, Poland
³Research Institute for Nuclear Problems of Belarusian State University, Minsk, Belarus
⁴Belarusian State University of Informatics and Radioelectronics, Minsk, Belarus
- 17:10 O-35 SIMS PROFILING OF ORGANIC-BASED MULTILAYER NANOSTRUCTURES WITH Al/LiF TOP ELECTRODE
M. N. Drozdov¹, G. L. Pakhomov¹, V. V. Travkin¹, M. N. Bochkarev²
¹Institute for Physics of Microstructures RAS, Nizhny Novgorod, Russia
²Razuvaev Institute of Organometallic Chemistry RAS, Nizhny Novgorod, Russia
- 17:30 O-36 MORPHOLOGY OF ANODIC POROUS ALUMINA MEMBRANES FABRICATED ON SUBSTRATES WITH DIFFERENT ELECTRIC CONDUCTIVITY
A. Maximenko^{1,2}, M. Marszałek¹, Y. Zabala¹, A. Zarzycki¹
¹Institute of Nuclear Physics Polish Academy of Sciences, Krakow, Poland
²Research Institute for Nuclear Problems of Belarusian State University, Minsk, Belarus

Conference Banquet

NANOSTRUCTURE BASED DEVICES

- 9:00 I-18 invited PHOTOCROMIC ORGANIC FIELD-EFFECT TRANSISTORS: MOLECULES, DEVICE PERFORMANCE AND LASER PATTERNING
Y. Wakayama
International Center for Materials Nanoarchitectonics, National Institute for Materials Science, Tsukuba, Japan
- 9:30 O-37 ANTIMONIDE-BASED SUPERLATTICE NANOSTRUCTURES TO DESIGN LONGWAVE INFRARED BARRIER DETECTORS
M. Delmas¹, P. Christol^{2,3}, R. Rossignol^{2,3}, J. B. Rodriguez^{2,3}
¹*School of Physics and Astronomy, Cardiff University, Cardiff, UK*
²*University of Montpellier, IES, Montpellier, France*
³*CNRS, IES, Montpellier, France*
- 9:50 O-38 PHOTOCURRENT IN THE DIODE STRUCTURE WITH STRONTIUM TITANATE XEROGEL FILMS ON P-TYPE SILICON
Xiang Wang¹, Zhiquan Cheng¹, H. Sohrabi Anaraki², N. V. Gaponenko², B. S. Kolosnitsin², P. A. Kholov², N. D. Manarkhovich², D. A. Golosov², V. A. Ivanov³, N. I. Kargin⁴
¹*Key Laboratory of RF Circuits and Systems, Ministry of Education, Hangzhou Dianzi University, Hangzhou, China*
²*Belarusian State University of Informatics and Radioelectronics, Minsk, Belarus*
³*SSPA Scientific and Practical Materials Research Center NASB, Minsk, Belarus*
⁴*National Research Nuclear University MEPhI, Moscow, Russia*
- 10:10 O-39 GENERATION OF NEW SPATIAL AND TEMPORAL COHERENT LIGHT STATES USING III-V SEMICONDUCTOR METASURFACE BASED LASER TECHNOLOGY: VORTEX, CONTINUUM, DUAL FREQUENCY FOR THz
A. Garnache¹, M. Seghilani¹, M. Sellahi¹, R. Paquet¹, B. Chomet¹, M. Myara¹, S. Blin¹, L. Legratiet², G. Beaudoin², I. Sagnes², P. Lalanne³
¹*IES - CNRS, Université Montpellier, Montpellier, France*
²*LPN-CNRS, Marcoussis, France*
³*LP2N - IOGS-Bordeaux, Talence, France*
- 10:30 O-40 COMPUTATIONAL EXPLORATION ON THE APPLICATION OF CARBON NANOTUBES IN PLANAR HELIX SLOW-WAVE STRUCTURE TRAVELING-WAVE TUBE
Y. D. Lim¹, S. Wang¹, S. Aditya¹, B. K. Tay², V. Labunov³
¹*School of Electrical and Electronics Engineering, Nanyang Technological University, Singapore*
²*School of Electrical and Electronics Engineering, and CINTRA CNRS/NTU/HALES Nanyang Technological University, Singapore*
³*Belarusian State University of Informatics and Radioelectronics, Minsk, Belarus*

- 10:50 O-41 INTERRELATION OF PLANCK THERMAL GLOW WITH CURRENT SATURATION EFFECT OF CARBON NANOTUBE FIELD EMITTERS
J. Wu¹, Z. Cheng¹, L. Sun¹, V. Labunov², B. Shulitski², I. Kashko²,
D. Grapov², N. Kargin³
¹*Institute of Electron Device & Application, Hangzhou Dianzi University, Hangzhou, Zhejiang, China*
²*Belarusian State University of Informatics and Radioelectronics, Minsk, Belarus*
³*National Research Nuclear University MEPhI, Moscow, Russia*
- 11:10 **General Discussion and Closing of the Conference**

POSTERS

- P-1 TEMPERATURE AND DEFORMATION DEPENDENCE OF OUTPUT WAVELENGTH AND POLARIZATION IN LASER DIODES BASED ON *p*-AlGaAs/GaAsP/*n*-AlGaAs NANOSTRUCTURES
E. V. Bogdanov, K. I. Kolokolov, N. Ya. Minina
M. V. Lomonosov Moscow State University, Moscow, Russia
- P-2 OPTICAL INTERCONNECTS BETWEEN SILICON CHIPS BASED ON LIGHT-EMITTING DIODES ON NANOSTRUCTURED SILICON
A. A. Leshok¹, A. V. Dolbik¹, Le Dinh Vi¹, A. I. Matskevich¹, V. B. Vysotskii², S. V. Shvedov²
¹*Belarusian State University of Informatics and Radioelectronics, Minsk, Belarus*
²*OJSC "Integral", Minsk, Belarus*
- P-3 TOP AND BOTTOM SPIN VALVES BASED ON NiFeMn ANTIFERROMAGNETIC TRIPLE ALLOYS
I. V. Blinov, T. P. Krinitsina, M. A. Milyaev, V. V. Popov, V. V. Ustinov
M. N. Miheev Institute of Metal Physics, Ekaterinburg, Russia
- P-4 SnS₂-BASED NANOSTRUCTURED LAYERS FOR SOLAR CELLS
E. A. Outkina¹, A. I. Vorobyova¹, A. A. Khodin²
¹*Belarusian State University of Informatics and Radioelectronics, Minsk, Belarus*
²*"Optics, Optoelectronics and Laser Techniques" Association, NASB, Minsk, Belarus*
- P-5 POSSIBLE PLASMONIC ENHANCEMENT OF ELECTROLUMINESCENCE
D. V. Guzатов¹, S. V. Gaponenko², H. V. Demir³
¹*Yanka Kupala State University of Grodno, Grodno, Belarus*
²*B. I. Stepanov Institute of Physics, NASB, Minsk, Belarus*
³*Institute of Materials Science and Nanotechnology, Bilkent University, Ankara, Turkey*
LUMINOUS! Center of Excellence, School of EEE, School of Physical and Mathematical Sciences, Nanyang Technological University, Singapore
- P-6 ELECTRIC FIELD EFFECT ON RADIATIVE RECOMBINATION FROM DEFECT LEVELS IN CdSe NANOPATELETS
A. O. Muravitskaya¹, L. I. Gurinovich¹, A. V. Prudnikau², M. V. Artemyev²
¹*B. I. Stepanov Institute of Physics NASB, Minsk, Belarus*
²*Research Institute for Physico-Chemical Problems of BSU, Minsk, Belarus*
- P-7 "DARK" MODES BACKSCATTERING AS POSSIBLE RATIONALE FOR ANOMALOUS RETROREFLECTION FROM STRONGLY ABSORBING POROUS NANOSTRUCTURES
V. V. Sergentu¹, V. Ursaki², Ed. Monaico², I. M. Tiginyanu³, S. Ya. Prislopski⁴, S. V. Gaponenko⁴
¹*Institute of Applied Physics, Academy of Sciences of Moldova Academy, Chisinau, Moldova*
²*Technical University of Moldova, Chisinau, Moldova*
³*Institute of Electronic Engineering and Nanotechnologies "D.Ghitu" Academy of Sciences of Moldova, Chisinau, Moldova; Technical University of Moldova Chisinau, Moldova*
⁴*B.I. Stepanov Institute of Physics NASB, Minsk, Belarus*

- P-8 ELECTROMAGNETIC INTERACTION OF ELECTRODEPOSITED NICKEL NANOWIRES WITH A NIOBIUM THIN FILM
S. V. Redko¹, E. B. Chubenko¹, A. L. Dolgii¹, Al. L. Dolgyi¹, V. A. Petrovich¹, S. L. Prischepa¹, A. L. Danilyuk¹, A. V. Andreyenko¹, V. P. Bondarenko¹, M. Trezza², C. Cirillo², C. Attanasio²
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²CNR-SPIN Salerno and Dipartimento di Fisica "E. R. Caianiello" Università degli Studi di Salerno Fisciano (Sa), Italy
- P-9 GRAIN EFFECT IN THE CARRIER MOBILITY OF BaSi₂ NANOFILMS
D. A. Shohonov¹, I. S. Samusevich¹, A. B. Filonov¹, D. B. Migas¹, K. Morita², T. Suemasu²
¹Belarusian State University of Informatics and Radioelectronics, Minsk, Belarus
²Institute of Applied Physics, University of Tsukuba, Tsukuba, Ibaraki, Japan
- P-10 MECHANISM OF CHARGE TRANSPORT IN Sr₂FeMoO_{6-δ} CERAMICS WITH INTERGRAIN DIELECTRIC SHEATHS
M. V. Yarmolich¹, N. A. Kalanda¹, S. E. Demyanov¹, A. V. Petrov¹, S.-C. Yu², S. K. Oh², D.-H. Kim²
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²Chungbuk National University, Cheongju, South Korea
- P-11 SYNTHESIS OF THE NANOSIZED Sr₂FeMoO_{6-δ} POWDER BY MEANS OF THE CITRATE-GEL TECHNOLOGY AND THE ULTRASOUND DISPERSION
A. V. Petrov¹, M. V. Yarmolich¹, N. A. Kalanda¹, S. A. Kovaleva², T. G. Shutava³, M. V. Shuba⁴
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³Institute of Chemistry of New Materials NASB, Minsk, Belarus
⁴Institute for Nuclear Problems, BSU, Minsk, Belarus
- P-12 ELECTRICAL CONDUCTION PROPERTIES OF NANOSTRUCTURED INDIUM OXIDE FILMS
A. E. Pochtenny, V. G. Luhn, S. S. Shikanov, V. S. Volobuev
Belarusian State Technological University, Minsk, Belarus
- P-13 MAGNETIC ORDERING IN DOPED TWO-DIMENSIONAL DICHALCOGENIDES
A. V. Krivosheeva¹, V. L. Shaposhnikov¹, J.-L. Lazzari²
¹Belarusian State University of Informatics and Radioelectronics, Minsk, Belarus
²Aix Marseille Université, CNRS-CINaM, Marseille, France
- P-14 RADIATION DAMAGE IN Si NANOSTRUCTURES: MOLECULAR DYNAMICS SIMULATION
V. I. Belko¹, N. N. Dorozhkin¹, V. Gusakov²
¹Belarusian State University, Minsk, Belarus
²Scientific-Practical Materials Research Centre NASB, Minsk, Belarus
- P-15 THE FEATURES OF STRUCTURAL AND MAGNETIC CHARACTERISTICS OF Co/Cu/Co THIN-FILM SYSTEMS
E. E. Shalygina¹, A. V. Makarov, A. M. Kharlamova¹, G. V. Kurlyandskaya², A. V. Svalov²
¹M. V. Lomonosov Moscow State University, Moscow, Russia
²Ural Federal University, Ekaterinburg, Russia
- P-16 INVERSION OF THE SnPc MOLECULE ON GRAPHENE
N. A. Poklonski, S. A. Vyrko, S. V. Ratkevich, A. I. Siahlo
Belarusian State University, Minsk, Belarus

- P-17 SOLUTE-DEPENDENT DFT SIMULATIONS OF ELECTRON AND SPIN PROPERTIES OF $C_{60}(OH)_{24}(Ni(CpCOOH)_2)_2$ CONJUGATES OF DIFFERENT MULTIPLICITY
 A. L. Pushkarchuk^{1,3}, T. V. Bezyazychnaya¹, V. I. Potkin¹, E. A. Dikusar¹,
 A. G. Soldatov^{1,4}, S. Ya. Kilin², A. P. Nizovtsev², S. A. Kuten³,
 E. M. Shpilevsky⁵, V. A. Pushkarchuk⁶
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⁵*A.V. Luikov Heat and Mass Transfer Institute NASB, Minsk, Belarus*
⁶*Belarusian State University Informatics and Radioelectronics, Minsk, Belarus*
- P-18 PURCELL EFFECT IN TAMM PLASMON STRUCTURES
 A. R. Gubaydullin^{1,2}, C. Symonds², J. Bellessa², K. A. Ivanov^{1,3}, E. D. Kolykhalova^{3,4},
 M. E. Sasin⁴, A. Lemaitre⁵, P. Senellart⁵, G. Pozina³, M. A. Kaliteevski^{1,3,4}
¹*St. Petersburg Academic University, St. Petersburg, Russia*
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³*ITMO University, St. Petersburg, Russia*
⁴*Ioffe Institute, St. Petersburg, Russia*
⁵*Centre de Nanosciences et Nanotechnologies, CNRS Université Paris-Saclay, Marcoussis, France*
- P-19 INVESTIGATION OF THE TUNNEL COMPONENT OF CONDUCTANCE IN HETEROSTRUCTURES WITH InGaAs/GaAs QUANTUM WELL BY ADMITTANCE SPECTROSCOPY
 Y. V. Ivanova, V. I. Zubkov
St. Petersburg Electrotechnical University "LETI", Saint-Petersburg, Russia
- P-20 NOVEL UP-CONVERSION IN OXYFLUORIDE GLASS-CERAMICS WITH (Eu,Tb,Yb):PbF₂ NANOCRYSTALS
 G. E. Rachkovskaya¹, G. B. Zakharevich¹, E. V. Vilejshikova², K. V. Yumashev²
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²*Center for Optical Materials and Technologies, Belarusian National Technical University, Minsk, Belarus*
- P-21 BORON CARBIDE PARTICLE SIZE EFFECTS ON THERMAL NEUTRON ATTENUATION BEHAVIOUR OF BORON CARBIDE-TITANIUM DIBORIDE COMPOSITES
 B. Buyuk, A. B. Tugrul, E. Demir, S. Aktop, A. O. Addemir
Istanbul Technical University, Istanbul, Turkey
- P-22 TEMPERATURE EFFECTS AND EXCITON-PHONON COUPLING IN SEMICONDUCTOR CdSe/ZnS QUANTUM DOTS
 E. Zenkevich¹, T. Kononova¹, A. Stupak², C. von Borczyskowski³
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²*B. I. Stepanov Institute of Physics NASB, Minsk, Belarus*
³*Institute of Physics, Chemnitz University of Technology, Chemnitz, Germany*
- P-23 LUMINESCENT AND OPTICAL PROPERTIES OF DOPED AND UNDOPED ULTRATHIN TITANIUM OXIDE FILMS
 M. V. Rudenko¹, T. I. Orekhovskaya¹, A. V. Mudryi²
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- P-24 EUROPIUM LUMINESCENCE OF AMORPHOUS YTTRIUM ALUMINA FILMS
J. C. Villegas Brito¹, N. V. Gaponenko¹, K. S. Sukalin¹, T. F. Raichenok²
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²B. I. Stepanov Institute of Physics, NASB, Minsk, Belarus
- P-25 THERMAL BEHAVIOR OF BIOACTIVE MAGNETIC NANOCOMPOSITES
G. P. Aleksandrova, G. F. Prozorova, B. G. Sukhov, B. A. Trofimov
A.E. Favorsky Irkutsk Institute of Chemistry SB RAS, Irkutsk, Russia
- P-26 SANS AND WXR D STUDY OF PbSe-DOPED SILICATE GLASSES
V. S. Gurin¹, G. E. Rachkovskaya², G. B. Zakharevich², S. E. Kichanov³
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- P-27 EFFECT OF MANGANESE IONS ON PHOTOLUMINESCENCE OF NANOPOROUS ANODIC ALUMINA
I. V. Gasenkova¹, N. I. Mukhurov¹, S. P. Zhvavyi¹, E. E. Kolesnik¹, A. P. Stupak²
¹State Research and Production Association "Optics, Optoelectronics and Laser Technology", Minsk, Belarus
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- P-28 MICRO-RAMAN STUDY OF TiInS₂ NANOCRYSTAL FORMATION IN Ti-In-As-S GLASS UNDER LASER ANNEALING
Yu. M. Azhniuk¹, A. V. Gomonnai¹, V. V. Lopushansky¹, O. O. Gomonnai², V. M. Rubish³, D. R. T. Zahn⁴
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- P-29 ENERGY SPECTRUM OF ELECTRONS TUNNELING TO THE SURFACE STATES IN NANOCOMPOSITE BASED ON TiO₂
T. N. Sidorova, A. L. Danilyuk
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- P-30 TERAHERTZ TRANSITIONS IN NARROW-GAP CARBON NANOTUBES AND GRAPHENE NANORIBBONS
V. A. Saroka¹, R. R. Hartmann², M. E. Portnoi¹
¹School of Physics, University of Exeter, Exeter, United Kingdom
²Physics Department, De La Salle University, Manila, Philippines
- P-31 APPLICATION OF METAL GRATING TO ENHANCE ABSORPTION OF ELECTROMAGNETIC RADIATION IN GRAPHENE
M. A. Yakovleva, K. G. Batrakov
Institute for Nuclear Problems of Belarus State University, Minsk, Belarus
- P-32 ELECTROMAGNETIC RESPONSE OF A ONE-DIMENSIONAL CHAIN OF INTERCONNECTED CARBON NANOTUBES IN THE SUB-TERAHERTZ RANGE
A. V. Melnikov, M. V. Shuba
Institute for Nuclear Problems of Belarus State University, Minsk, Belarus
- P-33 FULLERENE-BASED NANOANTENNA AND ITS PROPERTIES
M. A. Britch
Heat and Mass Transfer Institute NASB, Minsk, Belarus

- P-34 BROADBAND ELECTRICAL PROPERTIES OF CARBON NANOTUBES-EPOXY RESIN COMPOSITES
I. Kranauskaitė¹, J. Macutkevicius¹, J. Banys¹, D. Bychanok², D. Meisak²
¹Vilnius University, Vilnius, Lithuania
²Research Institute for Nuclear Problems of Belarusian State University, Minsk, Belarus
- P-35 SYNERGETIC IMPACT OF GRAPHITE NANOPATELETS AND TRIGLYCINE SULPHATE PARTICLES ON THE FERROELECTRIC PROPERTIES OF EPOXY COMPOSITES
A. Plyushch¹, J. Macutkevicius¹, V. Samulionis¹, J. Banys¹, P. Kuzhir², V. Fierro³, A. Celzard³
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³Université de Lorraine, Epinal, France
- P-36 SERS ACTIVITY OF SILVER NANOSTRUCTURES WITH DIFFERENT SHAPE IN PORES OF SiO₂ TEMPLATE ON *n*-Si
D. V. Yakimchuk¹, E. Yu. Kaniukov¹, S. E. Demyanov¹, G. M. Arzumanyan², V. Sivakov³
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²Joint Institute for Nuclear Research, Dubna, Russia
³Leibniz Institute of Photonic Technology, Jena, Germany
- P-37 LUMINESCENT CARBON NANODOTS FABRICATED BY LASER ASSISTED SYNTHESIS IN LIQUIDS
N. N. Tarasenko, A. A. Nevar, A. V. Butsen, N. V. Tarasenko, V. A. Lapina
B. I. Stepanov Institute of Physics NASB, Minsk, Belarus
- P-38 SURFACE ENERGY STATES AND PHOTOLUMINESCENCE QUENCHING IN NANOSTRUCTURES BASED ON CdSe/ZnS QUANTUM DOT AND PORPHYRIN MOLECULE: ENSEMBLE AND SINGLE OBJECT DETECTION
E. Zenkevich¹, C. Goehler², C. Krasselt², C. von Borczyskowski²
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²Institute of Physics, Chemnitz University of Technology, Chemnitz, Germany
- P-39 GOLD NANORODS FOR SURFACE ENHANCED RAMAN SPECTROSCOPY
L. L. Trotsiuk, A. S. Matsukovich, E. V. Shabunya-Klyachkovskaya, O. S. Kulakovich
B. I. Stepanov Institute of Physics NASB, Minsk, Belarus
- P-40 SOL-GEL FABRICATION OF ZINC OXIDE NANOSTRUCTURED COATINGS ON A FIBERGLASS TISSUE
T. A. Filippova¹, V. E. Borisenko¹, V. V. Uglov^{2,3}, S. V. Zlotski²
¹Belarusian State University of Informatics and Radioelectronics, Minsk, Belarus
²Belarusian State University, Minsk, Belarus
³Tomsk Polytechnic University, Tomsk, Russia
- P-41 SOLVOTHERMAL SYNTHESIS OF NANOSTRUCTURED MOLYBDENUM-VANADIUM OXIDES WITH HIGH CONCENTRATION OF REDOX CENTERS
T. V. Sviridova¹, A. S. Logvinovich¹, D. V. Sviridov¹, A. I. Kokorin²
¹Department of Chemistry, Belarusian State University Minsk, Belarus
²Semenov Institute of Chemical Physics RAS, Moscow, Russia
- P-42 PHOTOCATALYTIC ACTIVITY OF NANOSTRUCTURED SEMICONDUCTING METAL OXIDES FABRICATED ON MICROSTRUCTURED ALUMINUM FOIL
A. V. Baglov, L. S. Khoroshko, N. M. Denisov
Belarusian State University of Informatics and Radioelectronics, Minsk, Belarus

- P-43 PROSPECTIVE GLASS-CERAMICS BASED ON COMPLEX COMPOUNDS WITH GARNET STRUCTURE
 Y. V. Bokshits¹, Y. U. Tratsiak¹, A. Borisevich², M. V. Kotjik², E. E. Trusova³
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- P-44 STRUCTURAL AND LUMINESCENT PROPERTIES OF $YAl_3(BO_3)_4:Ce^{3+},Tb^{3+}$ POLYCRYSTALS SYNTHESIZED BY COLLOID CHEMICAL APPROACHES
 G. P. Shevchenko¹, Y. V. Bokshits¹, Y. U. Ivlieva¹, G. V. Shishko¹, T. G. Khottchenkova², G. E. Malashkevich², I. I. Sergeev²
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²B. I. Stepanov Institute of Physics NASB, Minsk, Belarus
- P-45 FORMATION AND PROPERTIES OF LANGMUIR-BLODGETT MONOLAYERS OF COPPER COMPLEX OF 2,4-HENEICOSANEDIONE WITH AMORPHOUS CARBON PARTICLES
 A. E. Salamianski, V. E. Agabekov
 Institute of Chemistry of New Materials NASB, Minsk, Belarus
- P-46 ULTRASONICALLY PREPARED MAGNETITE COLLOIDS WITH LAYER-BY-LAYER HYDROPHILIC POLYELECTROLYTE SHELL
 K. S. Livanovich¹, T. G. Shutava¹, V. V. Pankov²
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²Department of Physical Chemistry, Belarusian State University, Minsk, Belarus
- P-47 INVESTIGATION OF ANTIBODY MODIFIED LIPOSOMES BINDING WITH PATTERNED FIBRINOGEN FILMS
 K. I. Dubatouka, I. V. Paribok, V. E. Agabekov
 Institute of Chemistry of New Materials NASB, Minsk, Belarus
- P-48 PORPHYRIN-INDUCED AGGREGATION OF SILVER NANOPARTICLES
 S. N. Terekhov¹, A. Yu. Panarin¹, A. V. Abakshonok², A. N. Eryomin²
¹B.I. Stepanov Institute of Physics NASB, Minsk, Belarus
²Institute of Chemistry of New Materials NASB, Minsk, Belarus
- P-49 CHARACTERIZATION OF SURFACE SPECIES ON MESOPOROUS TiO_2 PREPARED BY TiC OXIDATION
 E. Ovodok¹, M. Ivanovskaya¹, S. Poznyak¹, N. Scharnagl², J. Tedim³
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³CICECO-Aveiro Institute of Materials, University of Aveiro, Aveiro, Portugal
- P-50 DICHROIC POLARIZING FILMS BASED ON POLY(VINYL ALCOHOL)-TUNGSTOPHOSPHORIC ACID NANOCOMPOSITES
 T. V. Shevchenko, N. I. Sushko, O. N. Tretinnikov
 B. I. Stepanov Institute of Physics NASB, Minsk, Belarus

- P-51 TITANIUM OXIDE AND SILICA-BASED DELIVERY SYSTEMS FOR NUCLEIC ACID FRAGMENTS
N. V. Shikina¹, E. V. Bessudnova¹, D. V. Korneev¹, A. S. Levina², M. N. Repkova², V. F. Zarytova², O. C. Efimova³, Z. R. Ismagilov³
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³*Institute of Coal Chemistry and Materials Science SB RAS, Kemerovo, Russia*
- P-52 CdTe QUANTUM DOTS NANOCOMPOSITE FILMS OBTAINED BY THERMAL DECOMPOSITION OF PRECURSORS EMBEDDED IN POLYMERIC MATRIX
F. Antolini¹, L. Ortolani²
¹*Photonics Micro and Nanostructures Laboratory ENEA Frascati, Frascati, Rome, Italy*
²*CNR Institute for Microelectronics and Microsystems, Bologna, Italy*
- P-53 SYNTHESIS OF SILICON CARBIDE NANOPARTICLES BY PLASMA-ASSISTED TECHNIQUES IN LIQUIDS
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