

Provisional list of NDTCS-2017 participants
(marked participants have already sent materials for the Workshop Proceedings)

Section 1. Nanomaterials and nanotechnologies (production, structure, properties and applications)

1.	EFFECTIVE SORBENTS BASED ON PLASMA-MODIFIED ALUMINOSILICATE MINERALS M. Bruyako, L. Grigoryeva Moscow State University of Civil Engineering (National research university), Russia, Moscow
2.	EFFECT OF ELECTROLYTE VISCOSITY ON HEATING OF GROWING ANODIC OXIDE DURING ELECTROCHEMICAL ANODIZING G. Rabatuev, O. Kupreeva, D. Tsirkunov, S. Lazarouk, V. Gritskov, V. Prannik, A. Kurilenko Belarusian State University of Informatics and Radioelectronics, Belarus, Minsk
3.	ACCUMULATION OF POROUS SILICON COMBUSTION ENERGY FOR MECHANICAL PULSE ENHANCEMENT IN MEMS S. Lazaruk, A. Dolbik, A. Sychevich, E. Maslenkova Belarusian State University of Informatics and Radioelectronics, Belarus, Minsk
4.	ANODIC TITANIUM OXIDE WITH CONTROLLABLE OPTICAL PROPERTIES FOR BIOMEDICAL APPLICATIONS V. Gritskov, E. Gvozdoyskaya, G. Rabatuev, S. Lazarouk, O. Kupreeva, A. Kurilenko, D. Isaev, F. Gorbachev, A. Lastovka, A. Mazurenko Belarusian State University of Informatics and Radioelectronics, Belarus, Minsk
5.	SYSTEMS OF RARE EARTH ELEMENTS L. Grigoryeva Moscow State University of Civil Engineering (National research university), Russia, Moscow
6.	APPROACHES FOR SUBSTRATE SURFACE FUNCTIONALIZATION WITH AgNPs A. Sharonova¹, M. Surmeneva¹, R. Surmenev¹, K. Loza², O. Prymak² and M. Eppl² ¹ National Research Tomsk Polytechnic University, Russia, Tomsk ² University of Duisburg-Essen, Germany, Essen
7.	DEVELOPMENT OF THE MICROPLASMA SPRAYING TECHNOLOGY FOR APPLYING BIOCOMPATIBLE COATINGS D. Alontseva, Y. Borisov, S. Voinarovych, A. Kislitsa, N. Prokhorenkova, A. Russakova, A. Krasavin D. Serikbayev East Kazakhstan State Technical University, Kazakhstan, Ust-Kamenogorsk city
8.	THE EFFECT OF COOLING RATE ON THE CRYSTALLIZATION OF ALUMINUM ALLOYS UNDER PRESSURE M. Denisov Vladimir State University, Russia, Vladimir
9.	UNRELAXED InAs _{1-x} Sb _x ALLOYS GROWN ON COMPOSITIONALLY GRADED BUFFERS WITH MOLECULAR-BEAM EPITAXY A. Sadikhova¹, G. Kipshidze², Y. Aliyeva¹, Sh. Ahmedova¹, N. Abdullayev¹ ¹ Institute of Physics, AZ-1143 Baku, Azerbaijan ² Stony Brook University, Stony Brook, New York 11794, USA
10.	THE FEATURES OF Ni-Fe NANOWIRES ELECTROCHEMICAL DEPOSITION INTO POROUS ALUMINA TEMPLATE A. Vorobjova, D. Shimanovich, E. Outkina Belarusian State University of Informatics and Radioelectronics, Belarus, Minsk
11.	NANOSTRUCTURED COMPOSITE MATERIALS FOR 3D ELEMENTS OF ADVANCED OPTICAL SYSTEMS Yu. Timoshkov, V. Kurmashev, A. Sakova, V. Timoshkov Belarusian State University of Informatics and Radioelectronics, Belarus, Minsk
12.	INTERNAL STRESS IN ALUMINUM LAYERS DEPOSITED ON DIELECTRIC SUBSTRATES FOR SENSOR APPLICATIONS D. Shimanovich, V. Yakovtseva, V. Sokol, A. Subko Belarusian State University of Informatics and Radioelectronics, Belarus, Minsk
13.	INFRARED AND VISIBLE PHOTOLUMINESCENCE FROM Er-DOPED SOL-GEL DERIVED FILMS L. Khoroshko¹, M. Rudenko¹, M. Stepikhova², A. Mudryi³, K. Sukalin¹, Y. Kornilova¹, N. Gaponenko¹ ¹ Belarusian State University of Informatics and Radioelectronics, Minsk, Belarus ² Institute for Physics of Microstructures Russian Academy of Sciences, Nizhny Novgorod, Russia ³ SSPA «Scientific-Practical Materials Research Centre of National Academy of Sciences of Belarus», Minsk, Belarus
14.	LATTICE VIBRATIONS IN FeIn ₂ S ₄ SINGLE CRYSTALS S. Pauliukavets, I. Bodnar, G. Smirnova, A. Karoza, T. Smirnova, I. Bychek Belarusian State Academy of Communication, Belarus, Minsk

15.	MECHANICAL PROPERTIES OF MEMS COMPONENTS BASED ANODIC ALUMINUM OXIDE S. Biran, D. Korotkevich, A. Korotkevich Belarusian State University of Informatics and Radioelectronics, Belarus, Minsk
16.	THE REDUCTION OF GRAPHENE FROM GRAPHENE OXIDE V. Labunov, L. Tabulina, L. Mikhnavets, A. Tkach Belarusian State University of Informatics and Radioelectronics, Belarus, Minsk
17.	SOLUTION-BASED HOT-CASTING TECHNIQUE TO RECEIVE A MICROMETER-SCALE CRYSTALLINE GRAINS OF PEROVSKITE A. Shakhnovich, D. Rudnitskaya Belarusian State University of Informatics and Radioelectronics, Belarus, Minsk
18.	NANOSTRUCTURED THIN FILM OF HALIDE PEROVSKITES VIA TWO-STEP SOLVENT-SOLVENT EXTRACTION D. Rudnitskaya, A. Shakhnovich Belarusian State University of Informatics and Radioelectronics, Belarus, Minsk
Section 2. Computational mechanics and computer-aided design. High-performance and cluster solutions for complex systems simulation	
1.	AB INITIO STUDIES OF SILVER PRECURSOR FOR FEBID: $\text{Ag}(\text{PMe}_3)_n$ ($n=2-4$) Jelena Tamuliene Vilnius University, Institute of Theoretical Physics and Astronomy, Lithuania, Vilnius
2.	GEOMETRIC MODELING OF MIDI-FULLERENE GROWTH FROM C_{40} TO C_{68} A. Melker, M. Krupina Peter the Great St. Petersburg Polytechnic University, Russia, Saint-Petersburg
3.	STRUCTURE OF THE $\Delta n=10$ SERIES FULLERENES A. Melker, M. Krupina, R. Zarafutdinov Peter the Great St.Petersburg Polytechnic University, Russia, Saint-Petersburg
4.	PERIODIC SYSTEM FOR BASIC PERFECT FULLERENES OBTAINED BY FUSION REACTIONS A. Melker, M. Krupina, R. Zarafutdinov Peter the Great St.Petersburg Polytechnic University, Russia, Saint-Petersburg
5.	ON OPTIMIZATION HYDROGENERATOR THRUST BEARING CHARACTERISTICS O. Antonova, A. Borovkov, U. Boldyrev, I. Voynov Peter the Great St.Petersburg Polytechnic University, Russia, Saint-Petersburg
6.	VALIDATION OF EURONCAP FRONTAL IMPACT OF FRAME OFF-ROAD VEHICLE – ROAD TRAFFIC ACCIDENT SIMULATION S. Alekseev, A. Tarasov, A. Borovkov, M. Aleshin, O. Klyavin Peter the Great St.Petersburg Polytechnic University, Russia, Saint-Petersburg
7.	APPLICABILITY OF POLYMER COMPOSITE MATERIALS IN THE DEVELOPMENT OF TRACTORS FALLING-OBJECT PROTECTIVE STRUCTURES (FOPS) D. Lebedev, M. Aleshin, K. Ivanov, O. Klyavin, S. Nikulina, O. Rozhdestvensky, A. Borovkov Peter the Great St.Petersburg Polytechnic University, Russia, Saint-Petersburg
8.	VEHICLE DYNAMICS PREDICTION MODULE Jose Luis Leoro Mendoza¹, S. Krutitskiy², A. Tarasov¹, M. Aleshin¹, O. Klyavin¹, A. Borovkov¹ ¹ Peter the Great St. Petersburg Polytechnic University, Russia, Saint-Petersburg ² CompMechLab Ltd., Russia, Saint-Petersburg
9.	NUMERICAL SIMULATION AND RESEARCH OF THE SPATIAL DAMAGE FOR THE MULTILAYER COMPOSITE SPECIMENS WITH CONSIDERING OF PROGRESSIVE DAMAGE REALIZED BASED ON MATERIAL STIFFNESS DEGRADATION I. Voynov Peter the Great St. Petersburg Polytechnic University, Russia, Saint-Petersburg
10.	DESIGN AND SIMULATION OF ADDITIVE MANUFACTURED STRUCTURES OF THREE-COMPONENT COMPOSITE MATERIAL A. Zobacheva, A. Nemov, A. Novokshenov, N. Ermolenko, M. Khovaiko, A. Borovkov Peter the Great St. Petersburg Polytechnic University, Russia, Saint-Petersburg
11.	DETERMINATION OF ADDED MASSES OF 2-D SHAPING IN INFINITE LIQUID ENVIRONMENT IN THE CASE OF VARIOUS TYPES OF MOVEMENTS D. Indeitsev, D. Morozov, A. Michailov Peter the Great St. Petersburg Polytechnic University, Russia, Saint-Petersburg

12.	<p>TOPOLOGY OPTIMIZATION AND CASTING PROCESS SIMULATION FOR LIGHTWEIGHT DESIGN AND MANUFACTURING FEASIBILITY OF AN AIRCRAFT BRACKET</p> <p>I. Orlova, M. Zhmaylo, E. Belosludtsev, A. Nemov, M. Khovaiko Peter the Great St. Petersburg Polytechnic University, Russia, Saint-Petersburg</p>
13.	<p>NVH ANALYSIS OF OFFROAD VEHICLE FRAME. EVALUATION OF MUTUAL INFLUENCE OF THE BODY-FRAME SYSTEM COMPONENTS</p> <p>A. Patrikeev, A. Tarasov, A Borovkov, M. Aleshin, O Klyavin Peter the Great St.Petersburg Polytechnic University, Russia, Saint-Petersburg</p>
14.	<p>INTEGRATED SYSTEM AS TOOL FOR IMPLEMENTATION OF SIMULATION- AND OPTIMIZATION-BASED DESIGN METHODOLOGY</p> <p>A. Novokshenov, A. Nemov, D. Mamchits, A. Zobacheva Peter the Great St. Petersburg Polytechnic University, Russia, Saint-Petersburg</p>
15.	<p>MODELING OF HEAT TRANSFER IN BUILT-UP CURVILINEAR PLATE</p> <p>I. Savel'eva, A. Zhuravskii Bauman Moscow State Technical University, Russia, Moscow</p>
16.	<p>INVESTIGATING THE PHYSICAL AND INFORMATION PARAMETERS OF NANOSCALE ELECTRONIC ELEMENTS AS PART OF THE COMPUTING SYSTEMS WITH THE NEURAL NETWORK ARCHITECTURE</p> <p>M. Makarov Vladimir State University, Russia, Vladimir</p>
17.	<p>THE STUDY OF CONTRIBUTION OF THERMIONIC AND TUNNEL COMPONENTS IN HETEROSTRUCTURES WITH A SINGLE QUANTUM WELL InGaAs/GaAs BY ADMITTANCE METHODS</p> <p>Y. Ivanova, V. Zubkov Saint-Petersburg Electrotechnical University "LETI", Russia, Saint-Petersburg</p>
18.	<p>ATOMIC STRUCTURE OF MONOELEMENT NANOCRYSTALS</p> <p>V. Liopo, A. Nikitin, E. Ovchinnikov, A.Sabuts, A. Sitkevich Yanka Kupala State University of Grodno,Belarus, Grodno nik@grsu.by</p>
19.	<p>ABSORPTION OF ELECTROMAGNETIC IRRADIATION IN ARRAYS OF CARBON NANOTUBES IN THE CUBTERAHERTZ RANGE</p> <p>A. Atdaev, A. Danilyuk, S. Prischepa Belarusian State University of Informatics and Radioelectronics, Belarus, Minsk</p>
20.	<p>METHOD OF ACCELERATED MODELING OF MICROSTRIP ANTENNA ARRAY CHARACTERISTICS USING CUDA TECHNOLOGY</p> <p>V. Kizimenko Belarusian State University of Informatics and Radioelectronics, Belarus, Minsk</p>
21.	<p>APPLICATION OF THE METHOD OF ELECTROTHERMAL ANALOGY FOR PREDICTION OF THE TEMPERATURE OF STRUCTURED SURFACES</p> <p>V. Lobunov, A. Kuharenko Belarusian State University of Informatics and Radioelectronics, Belarus, Minsk</p>
22.	<p>MAGNETORESISTANCE OF MULTILAYER NANOSTRUCTURES</p> <p>V. Sergeenko, A. Danilyuk Belarusian State University of Informatics and Radioelectronics, Belarus, Minsk</p>
23.	<p>USING THE SIMULATION MODEL AS TOOL FOR PLANNING THE OPERATION IN THE DIAMOND MINE</p> <p>D. Gusev, R. Ismailov National Research University Higher School Of Economics, Department Of Business and Management, School of Logistics, Moscow, Russia,</p>
24.	<p>Fractal structure copper clusters in a matrix of polytetrafluoroethylene</p> <p>A. Belko, A. Nikitin Yanka Kupala State University of Grodno, Belarus, Grodno</p>
<p>Section 3. Computer simulation in micro- and nanoelectronics</p>	
1.	<p>MAGNETIC AND THERMAL FIELD MODULATION OF HELMHOLTZ COIL AND AXIAL EIGHT-COIL SYSTEM USING COMSOL SOFTWARE</p> <p>I. Zatonov Tomsk Polytechnic University, Russia, Tomsk</p>
2.	<p>INVESTIGATION OF THE RADIATIONS EFFECT ON THE ELECTRICAL CHARACTERISTICS OF A JUNCTION FIELD-EFFECT TRANSISTOR</p> <p>O. Dvornikov, I. Lovshenko, V. Stempitsky, V. Khanko Belarusian State University of Informatics and Radioelectronics, Belarus, Minsk</p>

3.	OPTIMIZATION OF STRUCTURAL AND TECHNOLOGICAL PARAMETERS OF JUNCTION FIELD-EFFECT TRANSISTOR WITH INCREASED RADIATION HARDNESS O. Dvornikov, I. Lovshenko, V. Stempitsky, V. Khanko Belarusian State University of Informatics and Radioelectronics, Belarus, Minsk
4.	PARALLEL COMPUTING ENVIRONMENT FOR DIGITAL DEVICES SIMULATION AND VLSI TOPOLOGY VERIFICATION A. Belous¹, V. Solodukha¹, S. Shvedov¹, A. Borovik², A. Kostrov², V. Stempitsky² ¹ Joint-Stock Company "INTEGRAL", Minsk, Belarus ² Belarusian State University of Informatics and Radioelectronics, Minsk, Belarus
5.	APPROACHES TO IMPLEMENTATION OF THE ION-SENSITIVE FIELD-EFFECT TRANSISTOR COMPACT MODELS Dao Dinh Ha Le Quy Don Technical University, Vietnam, Hanoi
6.	CALCULATING AND MODELING OF INTEGRATED DISPLACEMENT SYSTEMS FOR PRECISION EQUIPMENT OF MICRO- AND NANOELECTRONICS I. Dainiak, V. Kuznetsov, S. Karpovich Belarusian State University of Informatics and Radioelectronics, Minsk, Belarus
7.	EMISSION PROPERTIES OF AN ARRAY OF SILICON NANO-CONES A. Trafimenko, A. Danilyuk Belarusian State University of Informatics and Radioelectronics, Belarus, Minsk
8.	SURFACE PLASMONS IN GRAPHENE HETEROSTRUCTURE A. Felsheruk, A. Danilyuk Belarusian State University of Informatics and Radioelectronics, Belarus, Minsk
9.	ELECTRON TUNNELING TO THE SURFACE STATES AT PHOTOCATALYSIS T. Sidorova, A. Danilyuk Belarusian State University of Informatics and Radioelectronics, Belarus, Minsk
10.	RF MEMS MODULATOR SIMULATION Ya. Shukevich, Ya. Douhaya Belarusian National Technical University, Belarus, Minsk
11.	SIMULATION OF ELECTRONIC AND MAGNETIC PROPERTIES OF CHROMITES OF RARE EARTH ELEMENTS A. Gulay, V. Stempitsky, I. Kolesnik, M. Baranava, N. Stashkevich, A. Yasevich Belarusian National Technical University, Belarus, Minsk Belarusian State University of Informatics and Radioelectronics, Belarus, Minsk
12.	LATTICE THERMAL CONDUCTIVITY OF TRANSITION METAL DICHALCOGENIDES A. Alexeev, A. Krivosheeva, V. Shaposhnikov, V. Borisenko Belarusian State University of Informatics and Radioelectronics, Belarus, Minsk
13.	GATE LEAKAGE CURRENT IN AlGaN SCHOTTKY DIODE IN TERMS OF PHONON-ASSISTED ELECTRON TUNNELING MODEL V. Volcheck Belarusian State University of Informatics and Radioelectronics, Belarus, Minsk
14.	SIMULATION OF THE OPTICAL WAVES INTERACTION WITH NANOSTRUCTURE THIN ALUMINUM-NICKEL FILMS T. Pechen, A. Prudnik Belarusian State University of Informatics and Radioelectronics, Belarus, Minsk
15.	PECULIARITIES OF MAGNETORESISTANCE OF THE SPIN VALVE WITH AN ANTIFERROMAGNETIC LAYER G. Baiman, A. Bogutsky, A. Danilyuk Belarusian State University of Informatics and Radioelectronics, Belarus, Minsk
16.	ANALYSIS AND DIGITAL PROCESSING OF SEM IMAGES OF ANODIC ALUMINA FILMS WITH NANOPOROUS STRUCTURE N. Lushpa, T. Dinh Belarusian State University of Informatics and Radioelectronics, Belarus, Minsk
17.	BREAKDOWN AND CONDUCTIVITY SWITCHING IN NANOSIZED HAFNIUM DIOXIDE D. Podryabinkin, A. Danilyuk Belarusian State University of Informatics and Radioelectronics, Belarus, Minsk
18.	ELECTROPHYSICAL PROPERTIES OF TRANSITION METALS CHALCOGENIDES STRUCTURES USED AS STRUCTURAL ELEMENTS OF NANOELECTRONICS DEVICES M. Baranava Belarusian State University of Informatics and Radioelectronics, Belarus, Minsk

19.	EXCHANGE INTERACTION IN ZnMnO M. Baranova Belarusian State University of Informatics and Radioelectronics, Belarus, Minsk
20.	ELECTRONIC PROPERTIES OF PHOSPHORENE WITH VACANCIES: AB INITIO STUDY V. Skachkova Belarusian State University of Informatics and Radioelectronics, Belarus, Minsk
21.	AB INITIO SIMULATION OF STRUCTURAL AND ELECTRONIC PROPERTIES OF "GRAPHENE ON SiO ₂ SUBSTRATE" SYSTEMS D. Hvazdouski Belarusian State University of Informatics and Radioelectronics, Belarus, Minsk