



Program of the
IV International Conference and School
"Advanced High Entropy Materials"

September 26-30, 2022

Belgorod State National Research University
Merzhanov Institute of Structural Macrokinetics and Materials Science,
Russian Academy of Sciences (ISMAN)
Siberian State Industrial University



Shkolny Boulevard, 1B, Chernogolovka, Moscow Region, Large living
room of the House of Scientists of the Scientific Center of the Russian
Academy of Sciences in Chernogolovka

26.09.2022 MONDAY
(Time: GMT+3)
14:00-16:00 REGISTRATION

27.09.2022 TUESDAY
(Time: GMT+3)

Chairmen: Alymov M.I., Salishchev G.A.

8:00	REGISTRATION		
9:00	Opening. Welcome speech		
9:20	Ilyushchanka A.Ph., <u>Savich V.V.</u> , Letsko A.I., Tarajkovich A.M.	POWDER METALLURGY OF BELARUS. SHS TECHNOLOGIES	O.V. Roman Powder Metallurgy Institute, Minsk, Republic of Belarus
9:50	<u>Salishchev G.A.</u>	SHORT-RANGE ORDERING AND ITS EFFECTS ON MECHANICAL PROPERTIES OF HIGH-ENTROPY ALLOYS	Belgorod State University, Belgorod, Russian Federation
10:20	<u>Levashov E.A.</u>	ADVANCED MATERIALS FOR HIGH-TEMPERATURE APPLICATIONS BY SHS	National University of Science and Technology MISiS, Moscow, Russian Federation
10:50-11:10 Coffee break			
11:10	<u>Savich V.V.</u>	TITANIUM POWDER METALLURGY. QUO VADIS?	O.V. Roman Powder Metallurgy Institute, Minsk, Republic of Belarus
11:25	<u>Naumova E.</u> , Belov N., Rogachev S., Doroshenko V., Barykin M., Vasina M.	HYPEREUTECTIC ALLOYS BASED ON Al-Ca-Mn- (Ni, Ce) SYSTEMS AS AN ALTERNATIVE TO HYPEREUTECTIC SILUMINS	National University of Science and Technology MISiS, Moscow, ussian Federation

11:40	<u>Ivannikov A. Yu.</u> , Grebennikov I. K., Klychevskikh Yu. A., Mikhailova A.V.	POWDER ROUTINE AND FIRST RESULT OF THE STRUCTURE AND PHYSICO-MECHANICAL PROPERTIES HOT PRESSURE FABRICATED Fe-Cr-Ni-Mo-W SPECIMENS	IMET RAS, Moscow, Russian Federation
11:55	<u>Pervikov A.V.</u> , Suliz K.V., Ivanov K.V., Ovchinnikov S.V.	STRUCTURAL-PHASE STATES OF MULTICOMPONENT ALLOYS NANOPARTICLES FABRICATED BY EXPLODING WIRES	Institute of Strength Physics and Materials Science, Tomsk, Russian Federation
12:10 (Online)	<u>Khina B. B.</u>	ESTIMATION OF ENTROPY OF MULTICOMPONENT 'HIGH ENTROPY' CERAMICS	Physicotechnical Institute, National Academy of Sciences of Belarus, Minsk, Republic of Belarus
12:25	<u>Rogachev A.S.</u> , Kovalev D.Yu., Vadchenko S.G.	RESEARCH OF STABILITY OF HIGH- ENTROPY ALLOYS PRODUCED BY MECHANICAL SYNTHESIS	Merzhanov Institute of Structural Macrokinetics and Materials Science Russian Academy of Sciences, Chernogolovka, Russian Federation
12:40	<u>Semenyuk A. O.</u> , Povolyaeva E. A., Zharebtsov S. V., Stepanov N. D.	THE EFFECT OF NITROGEN ON THE STRUCTURE AND MECHANICAL PROPERTIES OF THE Fe ₄₀ Mn ₄₀ Cr ₁₀ Co ₁₀ -BASED ALLOYS	Belgorod State University, Belgorod, Russian Federation
12:55	<u>Sidnov K. P.</u> , Sedegov A. S., Moskovskikh D. O.	INVESTIGATION OF THE COMPOSITIONAL SPACE OF MULTICOMPONENT HIGH- ENTROPY CARBIDES VIA MACHINE LEARNING	National University of Science and Technology MISiS, Moscow, Russian Federation
13:10-14:30 Lunch			
<i>Chairmen: Sanin. V.N., Zharebtsov S. V.</i>			
14:30	<u>Gelchinski B. R.</u> , Korolev O. A., Ignatieva E. V., Varaksin A. V., Rempel A. A.	THERMAL STRENGTHENING OF HIGH-ENTROPY RARE-EARTH ALLOYS WITH YTTRIUM AND SCANDIUM	Institute of Metallurgy of the Ural Branch of the Russian Academy of Sciences, Ekaterinburg, Russian Federation

15:00	<u>Alymov M.I.</u>	SYNTHESIS OF MATERIALS BY THE COMBUSTION	Merzhanov Institute of Structural Macrokinetics and Materials Science Russian Academy of Sciences, Chernogolovka, Russian Federation
15:30	<u>Akopyan T.K.</u> , Belov N.A., Lukyanchuk A.A., Letyagin N.V., Milovich F.O., Fortuna A.S.	EFFECT OF Sn AND In ON THE MICROSTRUCTURE AND STRENGTHENING IN THE ALUMINUM Al-Cu-Si BASED ALLOYS	National University of Science and Technology MISiS, Moscow, Russian Federation
15:45	<u>Varaksin A.V.</u> , Petrova S.A., Rempel A.A.	METHOD FOR THE SYNTHESIS OF HIGH-ENTROPY CARBIDE IN AN IONIC MELT	Institute of Metallurgy of the Ural Branch of the Russian Academy of Sciences, Ekaterinburg, Russian Federation
16:00-16:20 Coffee break			
16:20	<u>Klimenko D.N.</u> , Stepanov N.D., Zherebtsov S.V.	QUALITATIVE EVALUATION OF THE PLASTICITY OF HIGH-ENTROPY ALLOYS BY ARTIFICIAL NEURAL NETWORK	Belgorod State University, Belgorod, Russian Federation
16:35	<u>Kuzminov E.D.</u> , Shugurov A.R., Garanin Yu.A.	EFFECT OF TA CONTENT ON MECHANICAL PROPERTIES AND ADHESION OF Ti-Al-Ta-Si-N COATINGS	Institute of Strength Physics and Materials Science SB RAS, Tomsk, Russian Federation
16:50	<u>Magomedova D.K.</u>	MECHANICAL PROPERTIES AND FRACTURE FEATURES OF THE Al-Mg-Si ALLOY IN THE CG AND UFG STATE	Saint Petersburg State University, Saint Petersburg, Russian Federation
17:00 -18:00 Poster session.			
18:00-19:00 Buffet reception.			

28.09.2022 WEDNESDAY
(Time: GMT+3)

Chairmen: Belov N.A., Tikhonova M. S.

9:00	<u>Liushinskii A.V.</u> Malinskii T.V., Rogalin V.E..	INTENSIFICATION OF THE DIFFUSION WELDING PROCESS BY PRELIMINARY LASER NANOMODIFICATION OF DETAILS SURFACES. JOINT OF ALUMINOSILICATE GLASS WITH MOLYBDENIC ALLOY	LLC “Aviaspacetech”, Moscow, Skolkovo, Russian Federation
9:30	<u>Mileiko S.T.</u>	FUTURE OF HIGH TEMPERATURE OXIDE-FIBRE/HEA-MATRIX COMPOSITES	Osipyan Institute of Solid State Physics of RAS, Chernogolovka, Russian Federation
10:00	<u>Astafurova E. G.</u> Reunova K. A., Panchenko M. Yu., Melnikov E. V., Astafurov S. V., Zagibalova E. A., Nifontov A. S.	THE EFFECT OF NITROGEN ALLOYING ON STACKING FAULT ENERGY, DISLOCATION ARRANGEMENT AND DEFORMATION MECHANISMS OF HIGH-ENTROPY CANTOR ALLOY	Institute of Strength Physics and Materials Science, Siberian Branch of Russian Academy of Sciences, Tomsk, Russian Federation
10:30 (14:30) (Online)	<u>Artyukhova N.V.</u> Anikeev S.G., Kaftaranova M.I., Khodorenko V.N., Mamazakirov O., Stolyarov V.V.	CHEMICAL MODIFICATION OF THE PORE SPACE OF SHS MATERIALS BASED ON TiNi	National Research Tomsk State University, Tomsk, Russian Federation
10:45 (14:45) (Online)	<u>Kaftaranova M.I.</u> Khodorenko V.N., Anikeev S.G., Artyukhova N.V.	STRUCTURE AND SHAPE MEMORY EFFECTS IN POROUS TiNi ALLOYS	National Research Tomsk State University, Tomsk, Russian Federation

11:00-11:20 Coffee break

11:20 (Online)	<u>Berezin N. B.</u> Mezhevich Zh. V.	MULTICOMPONENT ELECTROPLATING COATINGS FROM SOLUTIONS OF HETERONUCLEAR COMPOUNDS	Kazan National Research Technological University, Kazan, Russian Federation
11:35 (15:35) (Online)	Osintsev K.A., Ivanov Yu.F., Konovalov S.V., <u>Gromov V.E.</u> , Shliarova Yu.A.	STRUCTURE AND PRACTICAL OF WELD CLADDING OF THE NON- EQUIATOMIC Al-Co-Cr-Fe-Ni HIGH- ENTROPY ALLOY SYSTEM ONTO ALUMINUM ALLOY A5083	Siberian State Industrial University, Novokuznetsk, Russian Federation
11:50 (13:50) (Online)	<u>Skachkov V. M.</u>	DIFFUSION-HARDENING COMPOSITE MATERIAL Ga-In-Sn-Cu-Ti	ISSC UB RAS, Ekaterinburg, Russian Federation
12:05 (16:05) (Online)	<u>Nevskii S. A.</u> , Sarychev V. D., Osintsev K. A., Konovalov S. V., Gromov V. E.	MECHANISM OF MICRO/NANOSTRUCTURED SURFACE FORMATION IN HIGH- ENTROPY ALLOYS AT ELECTRON BEAM TREATMENT	Siberian State Industrial University, Novokuznetsk, Russian Federation
12:20 (14:20) (Online)	<u>Pleshchev V. G.</u> , Komarova V.A.	INFLUENCE OF ADDITIONAL INTERCALIATION COPPER ATOMS ON THE PHYSICAL PROPERTIES OF $Cu_y-Cr_{0.25}HfSe_2$	Institute of Natural Sciences and Mathematics, Ural Federal University named after B.N.Yeltsin. Ekaterinburg, Russian Federation
12:35 (14:35) (Online)	<u>Samodurova M.N.</u> , Litvinyuk K.S., Zaitseva O.V., Trofimova S.N., Trofimov E.A.	DEVELOPMENT OF THE SCIENTIFIC BASIS FOR HIGH-ENTROPY ALLOY COATING BY LASER CLADDING AND BY COMBINED ADDITIVE TECHNOLOGIES	South Ural State University (national research university), Chelyabinsk, Russian Federation

12:50 (14:50) (Online)	<u>Sipatov I.S.</u> , Petrova S.A., Ignatieva E.V., Rempel A.A.	STRUCTURE OF MULTICOMPONENT ALLOYS SYNTHESISED BY ARC MELTING	Institute of Metallurgy of the Ural Branch of the Russian Academy of Sciences, Ekaterinburg, Russian Federation
13:05-14:30 Lunch			
<i>Chairmen: Liushinskii A.V., Trofimov E.A.</i>			
14:30	<u>Belov N.A.</u> , Cherkasov S.O., Tsydenov K.A.	ALUMINUM ALLOYS OF Al–Cu–Mn (Zr, Si) SYSTEM FOR WROUGHT PRODUCTS WITHOUT REQUIREMENT FOR SOLUTION TREATMENT AND QUENCHING	National University of Science and Technology MISiS, Moscow, Russian Federation
15:00	<u>Stepanov N.D.</u>	DEVELOPMENT OF BCC/B2- STRUCTURED HIGH ENTROPY ALLOYS	Belgorod State University, Belgorod, Russian Federation
15:30	<u>Sanin. V.N.</u> , Ikornikov D.M., O.A. Golosova, Yukhvid V.I.	PRODUCTION OF CAST HIGH- ENTROPY ALLOYS BY CENTRIFUGAL SHS-METALLURGY DISPERSION-HARDENED IN-SITU	Merzhanov Institute of Structural Macrokinetics and Materials Science Russian Academy of Sciences, Chernogolovka, Russian Federation
15:45	<u>Fedotov A.D.</u> , Mukanov S.K., Loginov P.A.	STUDY OF MECHANICAL AND TRIBOLOGICAL PROPERTIES OF Fe- Co-Ni-Cr-Cu _x HIGH-ENTROPY ALLOYS	National University of Science and Technology MISiS, Moscow, Russian Federation

16:00-16:20 Coffee break

16:20	<u>Zherebtsov S. V.</u> Ozerov M. S., Stepanov N. D.	STRUCTURE AND PROPERTIES OF HIGH-ENTROPY ALLOY-BASED METAL-MATRIX COMPOSITES	Belgorod State University, Belgorod, Russian Federation
16:35	<u>Letvagin N.V.</u> Akopyan T.K.	THE ROLE OF SN TRACE ADDITION ON THE PRECIPITATION BEHAVIOR AND STRENGTHENING OF THE Al- Cu-Mn ALLOY	National University of Science and Technology MISiS, Moscow, Russian Federation
16:50	<u>Doroshenko V.V.</u> Barykin M.A.	STUDY OF THE STRUCTURE OF AN ALLOY WITH CALCIUM BASED ON THE Al-Mg-Ca-Zn-Fe-Si-Mn MULTICOMPONENT	National University of Science and Technology MISiS, Moscow, Russian Federation
17:05	<u>Poliakov M.V.</u> Rogachev A.S	EVOLUTION OF STRUCTURE OF CoCrFeNiCu HIGH-ENTROPY ALLOY DURING PROLONG ANNEALING	Merzhanov Institute of Structural Macrokinetics and Materials Science Russian Academy of Sciences, Chernogolovka, Moscow, Russian Federation / Institute of Nanotechnology of Microelectronics of the Russian Academy of Sciences, Moscow, Russian Federation

17:20	<u>Drozin A.D.</u>	MATHEMATICAL MODELLING OF MULTICOMPONENT NUCLEI GROWTH USING NONEQUILIBRIUM THERMODYNAMICS METHODS	South Ural State University (National Research University), Chelyabinsk, Russian Federation
17:35	<u>Sanin V.V.</u> , Aheiev M.I., Ikornikov D.M., Sanin V.N., Levashov E.A. ,	MECHANICAL PROPERTIES AND HEAT RESISTANCE OF NiAl BASED ALLOYS PRODUCED BY CENTRIFUGAL SHS - CASTING	National University of Science and Technology "MISiS", Moscow, Russian Federation
17:50 (19:50) (Online)	Trofimov E.A., Mikhailov D.V., Ostovari Moghaddam A., <u>Zaitseva O.V.</u>	THE SYNTHESIS, STUDY OF THE STRUCTURE AND PROPERTIES OF HIGH-ENTROPY INTERMETALLIC COMPOUNDS	South Ural State University (national research university), Chelyabinsk, Russian Federation

29.09.2022 THURSDAY
(Time: GMT+3)

Chairmen: Makarov A.V., Astafurova E. G.

9:00	<u>Makarov A.V.</u> , Kharanzhevskiy E.V., Stepchenkov A.K., Volkova E.G., Korobov Yu.S., Vopneruk A.A.	PROSPECTS FOR SHORT-PULSE LASER APPLICATION FOR OBTAINING HIGH-ENTROPY ALLOY COATINGS	M.N. Mikheev Institute of Metal Physics of the UB RAS, Ekaterinburg, Russian Federation
9:30	<u>Trofimov E.A.</u> , Zaitseva O.V., Zhivulin V.E., Cherkasova N.A., Sherstyuk D.P., Gudkova S.A., Zherebtsov D.A., Myasnikova A.A., Starikov A.Yu., Vinnik D.A.	NEW HIGH-ENTROPY OXIDE PHASES WITH MAGNETOPLUMBITE STRUCTURE	South Ural State University (National Research University), Chelyabinsk, Russian Federation
10:00 (14:00) (Online)	Osintsev K.A., <u>Konovalov S.V.</u> , Gromov V.E., Ivanov Y.F., Panchenko I.A.	THE EFFECT OF HIGH-CURRENT PULSED ELECTRON BEAM TREATMENT ON THE ELEMENTAL DISTRIBUTION IN Al-Co-Cr-Fe-Ni HIGH-ENTROPY ALLOY	Siberian State Industrial University, Novokuznetsk, Russian Federation / Samara National Research University, Samara, Russian Federation.
10:30	<u>Yurchenko N. Yu.</u> , Panina E. S., Tojibaev A. A., Novikov V. Yu., Salishchev G. A.	SIMULTANEOUS INCREASE IN STRENGTH AND DUCTILITY OF REFRACTORY MEDIUM-ENTROPY ALLOYS DUE TO B2 ORDERING	Belgorod State University, Belgorod, Russian Federation
10:45 (14:45) (Online)	<u>Khodorenko V.N.</u> , Anikeev S.G., Kaftaranova M.I., Artyukhova N.V., Gunther V.E.	FEATURES OF THE MICROSTRUCTURE OF POROUS- PERMEABLE TiNi – BASED ALLOY PRODUCED BY SHS AND SINTERING METHODS	National Research Tomsk State University, Tomsk, Russian Federation

11:00-11:15 Coffee break

11:15	<u>Sologubova I. A.</u> , Kotvanova M. K.	PROTECTIVE SHS-COATING FOR STEEL PRODUCTS	Yugra State University, Khanty- Mansiysk, Russian Federation
11:30	<u>Dudorov M.V.</u> , Drozin A.D., Roshchin V.E.	THE MATHEMATICAL MODEL FOR CRYSTALS GROWTH IN MULTICOMPONENT MELTS WITHOUT THE LOCAL EQUILIBRIUM ON THEIR SURFACE	South Ural State University (National Research University), Chelyabinsk, Russian Federation
11:45	<u>Sedegov A. S.</u> , Kuskov K. V., Nepapushev A. A., Korotitskiy A. V., Moskovskikh D. O.	INFLUENCE OF Hf, Mo AND W DOPING ON THE MICROSTRUCTURE, MECHANICAL PROPERTIES AND OXIDATION RESISTANCE (TaTiNbZrX)C HIGH ENTROPY CERAMICS	National University of Science and Technology MISiS, Moscow, Russian Federation

12:00-13:00 Lunch

Chairmen: Sanin V.N., Salishchev G.A.

**13:00 -18:00 Visiting scientific session
State Organization "Gagarin Research&Test Cosmonaut Training Center"**

19:00 Banquet

30.09.2022 FRIDAY**(Time: GMT+3)***Chairmen: Stepanov N. D., Yurchenko N. Yu.*

9:00 (14:00) (Online)	<u>Liu X.</u> , Lu Y., Xu Q., Yang L., Shen H., Sun W., Zhang X., Wang Y.	A NOVEL SYNTHESIS PROCESS OF HIGH-ENTROPY (HfZrTiNbTa) _N POWDER VIA SILICON THERMAL REDUCTION NITRIDATION	North Minzu University, Yinchuan, China
9:15 (14:15) (Online)	<u>Ali Arab,</u> Pengwan Chen	AlCoCrFeNi HIGH ENTROPY ALLOY: FABRICATION TECHNIQUES AND MECHANICAL PROPERTIES UNDER THE EXTREME CONDITION	Advanced Technology Research Institute, Beijing Institute of Technology, China
9:30 (14:30) (Online)	<u>Wu Z.</u> , Zhang S., Zhang H., Liu M., Hai W., Chen Y.	PREPARATION AND TRIBOLOGICAL PROPERTIES OF (MoTaTiV) _{C4} CERAMICS	North Minzu University, Yinchuan, China
9:45 (14:45) (Online)	<u>Zhang X.</u> , Chen Y., Qi W., Hai W., Hong T.	EFFECT OF BORIDES ADDITION ON THE OXIDATION BEHAVIOR OF Ta ₂₅ W ₂₅ Mo ₂₅ Nb ₂₅ ALLOY	North Minzu University, Yinchuan, China
10:00 (15:00) (Online)	<u>Guo Y.</u> , Liu R., Jia B., Chen P.	MICROSTRUCTURE CHARACTERIZATION AND DYNAMIC BEHAVIOR OF NbZrTiTa REFRACTORY HIGH ENTROPY ALLOY	Beijing Institute of Technology, China
10:15 (13:15) (Online)	<u>Manabayeva A.M.</u> , Kaumenova G.N., Tungatarova S.A.	CATALYTIC REFORMING OF BIOGAS TO OBTAIN SYNTHESIS-GAS	D.V. Sokolsky Institute of Fuel, Catalysis and Electrochemistry, Almaty, Kazakhstan/ Kazakh-British Technical University, Almaty, Kazakhstan
10:30 (14:30) (Online)	<u>Nifontov A. S.</u> , Panchenko M. Yu., Astafurova E. G.	THE EFFECT OF AGE- HARDENING ON HYDROGEN EMBRITTLMENT OF CoCrFeMnNi HIGH ENTROPY ALLOY	Institute of Strength Physics and Materials Science SB RAS, Tomsk, Russian Federation

10:45 (12:45) (Online)	<u>Balyakin I.A.</u> , Rempel A.A.	STRUCTURAL AND COMPOSITIONAL TRANSFERABILITY OF DEEP LEARNING POTENTIALS: EXAMPLE OF GdTbDyHoSc	Institute of Metallurgy of the Ural Branch of the Russian Academy of Sciences, Ekaterinburg, Russian Federation
11:00-11:20 Coffee break			
11:20 (15:20) (Online)	<u>Vyrodova A.V.</u> , Kireeva I.V., Chumlyakov Yu.I.	ORIENTATION DEPENDENCE OF THE CRITICAL RESOLVED SHEAR STRESS FOR SLIP AND TWINNING IN SINGLE CRYSTALS OF THE CoCrFeNiMo HIGH-ENTROPY ALLOY	National Research Tomsk State University, Siberian Physical-Technical Institute of V.D. Kuznetsova, Tomsk, Russian Federation
11:35 (15:35) (Online)	<u>Gurtova D. Yu.</u> , Astapov D. O., Astafurova E. G., Panchenko M. Yu.	THE EFFECT OF NITROGEN ALLOYING ON HYDROGEN EMBRITTLMENT OF HIGH- ENTROPY CANTOR ALLOY	National Research Tomsk State University, Tomsk, Russian Federation
11:50 (Online)	<u>Kubanova A.N.</u>	POWDER HIGH-ENTROPY ALLOY SYSTEM Cr-Fe-Co-Ni FOR ADDITIVE MANUFACTURING	Merzhanov Institute of Structural Macrokinetics and Materials Science Russian Academy of Sciences, Chernogolovka, Russian Federation / Federal State Budgetary Educational Institution of Higher Education «Tula State Lev Tolstoy Pedagogical University», Tula, Russian Federation
12:05 (14:05) (Online)	<u>Mikhailov D. V.</u> , Ostovari Moghaddam A., Shaburova N. A., Fereidonnejad R., Zaitseva O. V., Trofimov E. A.	SYNTHESIS OF NOVEL HIGH- ENTROPY INTERMETALLIC COMPOUNDS (NiCoFeCuMn)Zn ₃ AND (NbTaVNiTIFe)	South Ural State University, Chelyabinsk, Russian Federation

12:20 (16:20) (Online)	<u>Reunova K. A.</u> , Astafurova E. G., Astafurov S. V., Melnikov E. V., Panchenko M. Yu., Astapov D. O.	THE EFFECT OF CARBON ALLOYING ON TEMPERATURE DEPENDENCE OF THE MECHANICAL PROPERTIES OF HIGH-ENTROPY FeMnCrNiCo ALLOY	Institute of Strength Physics and Materials Science SB RAS, Tomsk, Russian Federation
12:35	<u>Sokolovsky V. S.</u> , Salishchev G. A.	OBTAINING A COMBINATION OF HIGH STRENGTH, DUCTILITY AND CREEP RESISTANCE OF Ti ₂ AlNb-BASED ALLOY	Belgorod State University, Belgorod, Russian Federation
12:50	<u>Panina E. S.</u> , Yurchenko N. Yu., Tojibaev A. A., Zherebtsov S. V., Stepanov N. D.	NEW REFRACTORY HIGH- ENTROPY ALLOYS WITH A BCC- B2 STRUCTURE	Belgorod State University, Belgorod, Russian Federation
13:05	<u>Ozerov M. S.</u> , Mironov S. Yu., Zherebtsov S. V., Salishchev G. A.	INVESTIGATION OF MICROSTRUCTURE AND RESIDUAL STRESS IN LASER- SHOCK-PEENED Ti-6Al-4V	Belgorod State University, Belgorod, Russian Federation
13:20	<u>Povolyaeva E. A.</u> , Astakhov I. I., Shaysultanov D. G., Stepanov N. D., Zherebtsov S. V.	MEDIUM ENTROPY Fe-BASED ALLOY WITH TRIP EFFECT	Belgorod State University, Belgorod, Russian Federation
13:35	<u>Lazarev P.A.</u> , Busurina M.L., Gryadunov A.N., Sytshev A.E., Boyarchenko O.D., Karpov A.V.	SHS DENSIFICATION OF Ti-Al-Si ALLOY: STRUCTURE AND PHASE FORMATION	Merzhanov Institute of Structural Macrokinetics and Materials Science, Chernogolovka, Russian Federation
13:50	<u>Semenchuk I.E.</u> , Shcherbakov V.A., Gryadunov A.N.	PREPARATION OF THE TiC-ZrC COMPOSITES BY ETE UNDER PRESSURE	Merzhanov Institute of Structural Macrokinetics and Materials Science, Chernogolovka, Russian Federation

14:05	<u>Rogachev S.A.</u>	MICROSTRUCTURES AND PROPERTIES OF HIGH-ENTROPY ALLOYS CoCrFeNiX _x (X _x = Al, Cu, Ti): A MOLECULAR DYNAMICS STUDY	Merzhanov Institute of Structural Macrokinetics and Materials Science, Chernogolovka, Russian Federation
14:20-15:00 Closing. Review of poster reports. Awarding of the best oral and poster presentations of young scientists.			

POSTER SESSION			
1.	<u>Xin D.</u> , Chen X.	IMPROVED MECHANICAL PROPERTIES OF $AlCo_xCrFeNi$ HIGH ENTROPY ALLOYS WITH HIGH CO CONTENT FABRICATED BY LASER MELTING DEPOSITION	Wenzhou University, Wenzhou City, China
2.	<u>Xin H. Y.</u> , Chen X. Z.	EFFECTS OF COLD ROLLING AND ANNEALING TREATMENT ON MICROSTRUCTURE AND PROPERTIES OF COFENIMNV HIGH-ENTROPY ALLOY	Wenzhou University, Wenzhou City, China
3.	<u>Xia J. Y.</u> , Chen X. Z.	INVESTIGATION ON THE MICROSTRUCTURE AND TRIBOLOGICAL RESPONSES OF NOVEL $CoCrCu_{0.2}FeMo_x$ HEA COATING USING PLASMA ARC CLADDING	Wenzhou University, Wenzhou City, China
4.	<u>Abzalov N.I.</u> , Seplyarsky B.S., Kochetkov R.A., Lisina T.G.	MACROKINETICS OF COMBUSTION OF GRANULAR MIXTURES (Ti+C)-Ni. EFFECT OF GRANULES SIZE	Merzhanov Institute of Structural Macrokinetics and Materials Science, Chernogolovka, Russian Federation
5.	<u>Azarau S.M.</u> , Petyushik E.E., Drobysh A.A., Evtukhova T.E.	CHARACTERISTICS OF POROUS MATERIALS FROM BASALT FIBERS	BNTU, Minsk, Republic of Belarus
6.	<u>Akopdzhanyan T.G.</u> , Rupasov S.I.	CHEMICALLY ACTIVATED COMBUSTION SYNTHESIS OF ALON UNDER HIGH NITROGEN PRESSURE	Merzhanov Institute of Structural Macrokinetics and Materials Science, Chernogolovka, Russian Federation
7.	<u>Anikeev S.G.</u> , Artyukhova N.V., Kaftaranova M.I., Khodorenko V.N., Mamazakirov O., Gunther V.E.	BIOCOMPATIBLE POROUS SHS TiNi-BASED MATERIAL WITH A MICROPOROUS SURFACE OF PORE WALLS	National Research Tomsk State University, Tomsk, Russian Federation
8.	<u>Astapov D. O.</u> , Reunova K. A., Gurtova D. Yu., Astafurova E. G.	PHASE COMPOSITION AND MECHANICAL PROPERTIES OF NITROGEN-CONTAINING HIGH-ENTROPY ALLOYS	National Research Tomsk State University, Tomsk, Russian Federation

9.	<u>Astakhov I. I.</u> Povolyaeva E. A., Shaysultanov D. G., Stepanov N. D., Zherebtsov S. V.	THE EFFECT OF SEVERE PLASTIC DEFORMATION ON STRUCTURE AND PROPERTIES OF MEDIUM ENTROPY ALLOYS WITH TWIP/TRIP EFFECTS	Belgorod State University, Belgorod, Russian Federation
10.	<u>Bazhina A.D.</u> Konstantinov A.S., Chizhikov A.P., Bazhin P.M., Stolin A.M.	STRUCTURES AND MECHANICAL CHARACTERISTICS OF LAYERED COMPOSITE MATERIAL BASED ON TiB/TiAl/Ti	Merzhanov Institute of Structural Macrokinetics and Materials Science, Russian Academy of Science, Chernogolovka, Russian Federation
11.	<u>Barinova T. V.</u> Barinov V.Yu., Kovalev I.D., Shchukin A.S., Semenova V.N.	SELF-PROPAGATING HIGH-TEMPERATURE SYNTHESIS (SHS) TECHNOLOGY FOR DISPOSAL OF RADIOACTIVE WASTE	Merzhanov Institute of Structural Macrokinetics and Materials Science, Russian Academy of Science, Chernogolovka, Russian Federation
12.	<u>Belov E. G.</u> Gabdrakhmanova Z. R., Mikhailov S. V.	SOLID-PHASE MECHANOCHEMICAL METHOD FOR OBTAINING METAL-POLYMER COMPOSITIONS	Kazan National Research Technological University, Kazan, Russian Federation
13.	<u>Borisov S.I.</u> Tkachev E.S., Borisova Y.I., Gaydar S.M., Kaibyshev R.O.	THE EFFECT OF PRIOR AUSTENITE GRAIN SIZE ON MICROSTRUCTURE AND TENSILE PROPERTIES OF TEMPERED LOW ALLOYED 0.2C STEEL	Moscow Timiryazev Agricultural Academy, Moscow, Russian Federation / Belgorod National Research University, Belgorod, Russian Federation
14.	<u>Bystrova I.M.</u> Khomenko N.Yu., Borshch V.N.	DEEP OXIDATION OF CO AND PROPANE ON Co-CATALYSTS PRODUCED BY LOW-TEMPERATURE COMBUSTION ON MODIFIED SUPPORTS	Merzhanov Institute of Structural Macrokinetics and Materials Science, Chernogolovka, Russian Federation

15.	<u>Vasil'ev A.E.</u> , Ivanov O.N., Yaprintsev M.N., Yaprintseva E.N., Novikov V. Yu.	FEATURES OF MICROSTRUCTURE AND THERMOELECTRIC PROPERTIES OF TWO-PHASED MATERIAL DERIVED FROM INITIAL HIGH- ENTROPY Bi-Sb-Te-Se-S SYSTEM	Belgorod State Technological University named after V.G. Shukhov, Belgorod, Russian Federation/ Belgorod State University, Belgorod, Russian Federation
16.	<u>Vasilyev D.S.</u> , Seplyarskii B.S., Kochetkov R.A., Lisina T.G.	THE REASON FOR THE INCREASE IN COMBUSTION RATE OF THE POWDER MIXTURE Ti+C DILUTED WITH COPPER	Merzhanov Institute of Structural Macrokinetics and Materials Science, Chernogolovka, Russian Federation
17.	<u>Vereshchak M.V.</u> , Klimenko D.N., Stepanov N.D., Zherebtsov S.V.	PREDICTION OF ELONGATION TO FRACTURE OF HIGH-ENTROPY ALLOYS USING NEURAL NETWORK	Belgorod State University, Belgorod, Russian Federation
18.	<u>Volokitina E.I.</u> , Sokolovsky V.S., Salishchev G.A.	THE EFFECT OF AGING ON MICROSTRUCTURE AND MECHANICAL PROPERTIES OF VIT-1 ALLOY	Belgorod State University, Belgorod, Russian Federation
19.	<u>Galkina M.E.</u> , Kolpakov A.Ya., Poplavsky A.I., Yapryntsev M.N., Novikov V. Yu., Manokhin S.S., Goncharov I. Yu.	NANOSTRUCTURED COATINGS BASED ON AMORPHOUS CARBON AND CARBON-DOPED WITH GOLD, SILVER AND NITROGEN OBTAINED BY THE PULSED VACUUM-ARC METHOD	Belgorod State University, Belgorod, Russian Federation
20.	<u>Grigoryev E. G.</u>	HIGH VOLTAGE CONSOLIDATION OF POWDER MATERIALS	Merzhanov Institute of Structural Macrokinetics and Materials Science, Chernogolovka, Russian Federation
21.	<u>Davydov D.M.</u>	INFLUENCE OF ELEMENTAL POWDER RAW MATERIALS ON THE FORMATION OF THE POROUS SKELETON OF THE MAX PHASE Ti ₃ SiC ₂ WHEN OBTAINED BY THE NON-VACUUM SHS METHOD	Samara State Technical University, Samara, Russian Federation

22.	<u>Degtyareva S.I.</u> Fedoseeva A. E.	EFFECT OF AGEING TIME ON THE TENSILE PROPERTIES OF THE LOW-CARBON 9% Cr MARTENSITIC STEEL	Belgorod State University, Belgorod, Russian Federation
23.	<u>Dudova N.R.</u> Mishnev R.V.	CREEP BEHAVIOR OF ADVANCED 9-12%Cr MARTENSITIC STEELS WITH INCREASED BORON AND DECREASED NITROGEN CONTENTS	Belgorod State University, Belgorod, Russian Federation
24.	<u>Kirillov A.O.</u> Uvarov V.I., Kapustin R.D.	SYNTHESIS OF POROUS CERAMIC MATERIALS BASED ON SILICON CARBIDE FOR MICROFILTRATION OF LIQUIDS	Merzhanov Institute of Structural Macrokinetics and Materials Science, Chernogolovka, Russian Federation
25.	<u>Kopytskiy V. O.</u> Petrov E. V.	ESTIMATION OF THE IMPACT PRESSURE OF THE IMPACTOR PLATE WITH A BRONZE BARRIER ACCELERATED BY THE EXPLOSION ENERGY	Merzhanov Institute of Structural Macrokinetics and Materials Science, Chernogolovka, Russian Federation
26.	<u>Kochetkov R.A.</u> Abzalov N.I., Seplyarskii B.S., Lisina T.G.	MACROKINETIC ANALYSIS OF THE COMBUSTION PATTERNS IN THE TRANSITION FROM POWDER TO GRANULATED MIXTURES BY THE EXAMPLE OF 5Ti+3Si AND Ti+C COMPOSITIONS	Merzhanov Institute of Structural Macrokinetics and Materials Science, Chernogolovka, Russian Federation
27.	<u>Krishenik P.M.</u> Rogachev S.A., Shkadinskii K. G.	MATHEMATICAL MODELING COMBUSTION OF LAYERED CONDENSED MEDIA TAKING INTO ACCOUNT THE DIFFUSION MIXING OF THE REACTANTS	Merzhanov Institute of Structural Macrokinetics and Materials Science, Chernogolovka, Russian Federation
28.	<u>Krotov V.E.</u> Filatov Ye.S.	THE INFLUENCE OF THE ELECTROLYSIS CURRENT ON THE ThO ₂ CONCENTRATION IN THE CRYSTALLINE SOLID SOLUTION UO ₂ -ThO ₂	Institute of High-Temperature Electrochemistry, Ural Branch of RAS, Ekaterinburg, Russian Federation
29.	<u>Krylov A. A.</u> Donets A. V., Emel'yanova Yu. V., Buyanova E. S.	OBTAINING AND STUDYING HIGH-ENTROPY COMPOSITIONS BASED ON BIMEVOX	Ural Federal University, Ekaterinburg, Russian Federation
30.	<u>Kuskov K.V.</u> Nepapushev A.A., Zakharova E.V., Belov D.S., Moskovskikh D.O.	PRODUCTION OF HIGH-ENTROPY Al-Co-BASED INTERMETALLIDE BY SELF-PROPAGATING HIGH-TEMPERATURE SYNTHESIS AND SPARK PLASMA SINTERING	National University of Science and Technology MISiS, Moscow, Russian Federation

31.	Seplyarskii B. S., Kochetkov R. A., <u>Lisina T. G.</u> , Abzalov N. I., Vasilyev D. S.	COMPARATIVE INVESTIGATION OF MACROKINETIC PARAMETERS OF DILUTED (Ti+C)-BASED POWDER AND GRANULAR MIXTURES	Merzhanov Institute of Structural Macrokinetics and Materials Science, Chernogolovka, Russian Federation
32.	Ilyushchanka A. Ph., <u>Letsko A.I.</u> , Baray S.G., Talako T.L., Reutsionak Yu. A.	OBTAINING COMPOSITE POWDERS FOR AS-THERMAL SPRAYING OF RAM	O.V. Roman Powder Metallurgy Institute, Minsk, Republic of Belarus
33.	<u>Litvinko A.A.</u>	PRODUCTION OF BRIQUETTES AND METALLURGICAL COMPOSITES FROM METAL-WORKING WASTE	Belarusian National Technical University, Minsk, Republic of Belarus
34.	<u>Malyshkina O. V.</u> , Mamaev D.V., Ivanova A.I.	THE EFFECT OF THE TELLURIUM VAPOR ON THE STRUCTURE FORMATION AND DIELECTRIC PROPERTIES OF A MULTI- COMPONENT SYSTEM BASED ON SODIUM-POTASSIUM NIOBATE	Tver State University, Tver, Russian Federation
35.	Matyunin V.M., <u>Marchenkov A.Yu.</u> , Zhgut D.A., Agafonov R.Yu., Pankina A.A.	STRUCTURAL-PHASE TRANSFORMATIONS IN HIGH- ALLOYED STEELS UNDER VARIOUS TYPES OF LOADING	National Research University "Moscow Power Engineering Institute", Moscow, Russian Federation
36.	<u>Mikheev R.S.</u> , Kalashnikov I.E., Kobeleva L.I., Bykov P.A.	ORGANIZATION OF FUNCTIONAL LAYERS OF COMPOSITE COATINGS FOR TRIBOTECHNICAL APPLICATION	Bauman Moscow State Technical University, Moscow, Russian Federation
37.	<u>Naumov S.V.</u>	WELDING TECHNIQUES OF Ti ₂ AlNb- BASED ALLOYS	Belgorod State University, Belgorod, Russian Federation
38.	<u>Nesterov K.M.</u> , Islamgaliev R.K.	THERMAL STABILITY AND CORROSION RESISTANCE OF ULTRAFINE-GRAINED HIGH- ENTROPY ALLOY Fe ₃₀ Ni ₃₀ Mn ₃₀ Cr ₁₀	USATU, Ufa, Russian Federation
39.	<u>Niyozbekov N. N.</u> , Saikov I. V., Mironov S. Yu., Kaibyshev R. O., Dolzhenko P. D. Malakhov A. Yu., Denisov I. V.	STUDY OF AlMg ₆ +TITANIUM WELD INTERFACE AFTER EXPLOSIVE WELDING	Merzhanov Institute of Structural Macrokinetics and Materials Science, Chernogolovka, Russian Federation

40.	<u>Novoselova A.V.</u> , Smolenski V.V.	ELECTROCHEMICAL FORMATION OF Ln-Ga-Al AND Ln-Ga-In (Ln = La, Pr, Dy) ALLOYS IN LIQUID METAL / MOLTEN SALT SYSTEM. THERMODYNAMICS OF TRIPLE COMPOUNDS	Institute of High-Temperature Electrochemistry UB RAS, Ekaterinburg, Russian Federation
41.	<u>Ozerov M. S.</u> , Sokolovsky V.S., Stepanov N. D., Zherebtsov S. V.	EFFECT OF HARDENING WITH BORIDES ON THE MICROSTRUCTURE AND MECHANICAL PROPERTIES OF TiNbZr AND Al ₅ Nb ₂₄ Ti ₄₀ V ₅ Zr ₂₆ ALLOY-BASED COMPOSITES	Belgorod State University, Belgorod, Russian Federation
42.	<u>Ozerov M. S.</u> , Sokolovsky V. S., Stepanov N. D., Zherebtsov S. V.	MICROSTRUCTURE AND MECHANICAL PROPERTIES OF Al ₅ Nb ₂₄ Ti ₄₀ V ₅ Zr ₂₆ ALLOY-BASED COMPOSITES, REINFORCED WITH BORIDE PARTICLES	Belgorod State University, Belgorod, Russian Federation
43.	<u>Ostovari Moghaddam A.</u> , Mikhailov D., Trofimov E.	OXIDATION RESISTANCE OF (NiCoFeCuMn) ₃ (AlTi) HIGH ENTROPY INTERMETALLIC COMPOUND	South Ural State University (National Research University), Chelyabinsk, Russian Federation
44.	<u>Panov D.O.</u> , Kudryavtsev E.A., Chernichenko R.S., Naumov S.V.	EFFECT OF ROTARY SWAGING AND SUBSEQUENT ANNEALING ON THE STRUCTURE AND MECHANICAL PROPERTIES OF A METASTABLE AUSTENITIC STAINLESS STEEL	Belgorod State University, Belgorod, Russian Federation
45.	<u>Pervikov A.V.</u> , Pustovalov A.V., Bauman Y.I., Potylitsyna A.R., Afonnikova S.D., Volodin A.M., Mishakov I.V.	CATALYTIC GROWTH OF CARBON NANOMATERIALS ON MULTICOMPONENT ALLOYS PRODUCED BY JOINT ELECTRIC EXPLOSION OF WIRES	Institute of Strength Physics and Materials Science SB PAS, Tomsk, Russian Federation
46.	<u>Petrov E. V.</u> , Kopytskiy V. O., Trofimov V. S.	STUDY OF THE MOTION VELOCITY OF W AND TiC PARTICLES DURING HIGH-ENERGY TREATING OF A BARRIER	Merzhanov Institute of Structural Macrokinetics and Materials Science, Chernogolovka, Russian Federation
47.	<u>Pugacheva E.V.</u> , Zhuk S. Ya., Borshch V. N.	POLYMETALLIC GRID CATALYSTS WITH ACTIVATED SURFACE FOR THE SYNTHESIS OF CARBON NANOTUBES FROM METHANE	Merzhanov Institute of Structural Macrokinetics and Materials Science, Chernogolovka, Russian Federation

48.	<u>Pugacheva E.V.</u> Zhuk S. Ya., Kochetkov R.A., Seplyarskii B.S., Borshch V.N.	SYNTHESIS AND INVESTIGATION OF TiC-Ni AND TiC-Ni-Co CATALYSTS FOR CO ₂ HYDROGENATION TO METHANE	Merzhanov Institute of Structural Macrokinetics and Materials Science, Chernogolovka, Russian Federation
49.	<u>Galiev F. F.</u> Malakhov A. Yu., Denisov I. V., Seropyan S. A., Shakhrai D. V., Sosikov V. A., Rapota D. Yu.	ASPECTS OF HIGH-SPEED PHOTOGRAPHY OF SHOCK-WAVE LOADING OF STEEL TUBE	Merzhanov Institute of Structural Macrokinetics and Materials Science, Chernogolovka, Russian Federation
50.	<u>Russkih A. S.</u> Zhilina E. M., Krasikov S. A.	STRUCTURE AND MECHANICAL PROPERTIES OF Al-Ti-Zr-V-Nb HIGH – ENTROPY ALLOYS OBTAINED BY ALUMATHERMY	Institute of Metallurgy of the Ural Branch of the Russian Academy of Sciences, Ekaterinburg, Russian Federation
51.	<u>Salamatov V. G.</u> Lepakova O. K., Shkoda O. A., Shchukin A. S., Kovalev I. D.	SYNTHESIS OF SINGLE-PHASE NbSi ₂ AND Nb ₅ Si ₃ IN THE MODE OF THERMALLY COUPLED SHS PROCESSES	Merzhanov Institute of Structural Macrokinetics and Materials Science, Chernogolovka, Russian Federation
52.	<u>Ganeev A.V.</u> , Nafikov R.K.	EFFECT OF HIGH-PRESSURE TORSION TEMPERATURE ON THE MICROSTRUCTURE, PHASE COMPOSITION, AND MECHANICAL PROPERTIES OF A HIGH-ENTROPY FeMnCrNiCo ALLOY	Research Institute of Physics of Advanced Materials, Ufa State Aviation Technical University, Ufa, Russian Federation
53.	<u>Sereda V.U.</u>	TECHNOLOGY OF OXID-FREE HEATING OF CHIP-POWDER DISPERSIONS OF FERROUS METALS IN HOT BRIQUETTING FURNACES	Belarusian National Technical University, Minsk, Republic of Belarus
54.	<u>Seropyan S. A.</u> , Saikov I. V., Saikova G. R.	INFLUENCE OF MECHANICAL ACTIVATION ON COMBUSTION PARAMETERS OF POWDER COMPACTS OF Hf-PTFE AND Hf-PTFE- Al SYSTEMS	Merzhanov Institute of Structural Macrokinetics and Materials Science, Chernogolovka, Russian Federation
55.	<u>Smirnov K. L.</u>	SIALON-BASED HETERO-MODULUS CERAMIC COMPOSITES BY CS AND SPS	Merzhanov Institute of Structural Macrokinetics and Materials Science, Chernogolovka, Russian Federation

56.	<u>Suvorova (Buinevich) V.S.</u> , Nepapushev A.A., Kuskov K.V., Moskovskikh D.O.	FABRICATION OF NOVEL REFRACTORY CARBONITRIDE CERAMICS FOR HIGH-TEMPERATURE APPLICATIONS BY COMBUSTION SYNTHESIS AND SPARK PLASMA SINTERING	National University of Science and Technology MISiS, Moscow, Russian Federation
57.	<u>Suleymanova I.I.</u> , Ivanov M.A., Tingaev A.K., Litvinyuk K.S., Trofimov E.A.	USING THERMO-CALC SOFTWARE TO SIMULATE THE WELDING PROCESS OF HIGH-ENTROPY ALLOYS	South Ural State University, Chelyabinsk, Russian Federation
58.	<u>Tkachev M. S.</u> , Malophejev S. S., Bodyakova A. I.	INFLUENCE OF FRICTION STIR PROCESSING ON THE MICROSTRUCTURE, PHYSICAL AND MECHANICAL PROPERTIES OF A Cu- Cr-Zr ALLOY	Belgorod State University, Belgorod, Russian Federation
59.	<u>Tojibaev A. A.</u> , Panina E. S., Zhilina M. A., Klimenko D. N., Yurchenko N. Yu.	INVESTIGATION OF THE EFFECT OF ALUMINUM ON THE STRUCTURE AND MECHANICAL PROPERTIES OF REFRACTORY $Al_xNb_{40}Ti_{40}V_{20-x}$ MEDIUM-ENTROPY ALLOYS	Belgorod State University, Belgorod, Russian Federation
60.	<u>Trusov G.V.</u> , Yermekova Zh.S. Roslyakov S.I.	SOLUTION COMBUSTION SYNTHESIS OF COCUFENI HIGH ENTROPY ALLOY AND THE FOLLOWING SPARK PLASMA SINTERING	National University of Science and Technology MISiS, Moscow, Russian Federation
61.	<u>Fedoseeva A.E.</u>	CREEP BEHAVIOR OF LOW-CARBON 9% Cr STEEL STRENGTHENED BY TAX NANOPARTICLES	Belgorod State University, Belgorod, Russian Federation
62.	<u>Cherezov N.P.</u> , Fadeev A.A.	OBTAINING OF SPHERICAL TITANIUM POWDER FOR USE IN ADDITIVE TECHNOLOGIES	Merzhanov Institute of Structural Macrokinetics and Materials Science, Chernogolovka, Russian Federation
63.	<u>Shaysultanov D. G.</u> , Povolyeva E. A., Stepanov N. D., Zharebtsov S. V.	STRUCTURE AND MECHANICAL PROPERTIES OF A MEDIUM-ENTROPY TRIP ALLOY PRODUCED BY SELECTIVE LASER MELTING	Belgorod State University, Belgorod, Russian Federation
64.	Panteleenko F.I., <u>Shmuradko V.T.</u> , Panteleenko E.F., Shmuradko N.A.	THE ISSUES AND RESULTS OF TECHNICAL CERAMICS PRODUCTS MANUFACTURING FOR INDUSTRY	Belarusian National Technical University, Minsk, Republic of Belarus

65.	<u>Shmuradko N.A.</u> , Panteleenko E.F., Panteleenko F.I., Bendik T.I. , Shmuradko V.T., Vinogradov V.V.	TECHNICAL CERAMICS (TC): PROBLEMS, PRINCIPLES AND MECHANISMS OF SCIENTIFIC AND PRACTICAL DEVELOPMENT AND IMPLEMENTATION IN PRODUCTION	Belarusian National Technical University, Republic of Belarus Saint Petersburg (OOO NPP " Izumrud"), Russian Federation
66.	<u>Umnov P.P.</u> , Chueva T.R., Molokanov V.V., Palii N.A., Krutilin A.V., Bahteva N.D.	PERSPECTIVES APPLICATIONS PRODUCTS FROM AMORPHOUS MICROWIRES FOR MEDICINE	A.A. Baikov Institute of Metallurgy and Materials Science, Moscow, Russian Federation
67.	<u>Yuzbekova D. Y.</u> , Dudko V. A., Vetrova S. M., Gaidar S. M., Kaibyshev R. O.	INFLUENCE TEMPERATURES OF TEMPERING ON MECHANICAL PROPERTIES OF STEEL 60Si2CrVNb	Russian State Agrarian University- Moscow Timiryazev Agricultural Academy, Moscow, Russian Federation /Russia Belgorod State University, Belgorod, Russian Federation
68.	Yurchenko N. Yu., Panina E. S., Zherebtsov S. V., Stepanov N. D., <u>Tuchina Yu.S.</u>	OXIDATION BEHAVIOUR OF EUTECTIC Al-Cr-Nb-Ti-Zr REFRACTORY HIGH-ENTROPY ALLOYS	Belgorod State University, Belgorod, Russian Federation
69.	<u>Yaprintsev M.N.</u> , Vasil'ev A.E., Ivanov O.N., Popkov D.A.	INTERCONNECTED EFFECTS OF SM- DOPING ON GRAIN STRUCTURE AND TRANSPORT PROPERTIES OF THE TEXTURED $Bi_{2-x}SM_xTe_{2.7}Se_{0.3}$ COMPOUNDS	Belgorod State University, Belgorod, Russian Federation
70.	<u>Zakharov K.V.</u> , <u>Andreev D.E.</u> , <u>Yukhvid V.I.</u> , <u>Sanin V.N.</u>	INFLUENCE OF THE Co CONTENT ON THE THE COMPOSITION AND STRUCTURE FORMATION OF CAST ALLOYS Co-Cr- Nb-W-Mo-Al-C IN THE PROCESS OF CENTRIFUGAL SHS-METALLURGY	Merzhanov Institute of Structural Macrokinetics and Materials Science, Chernogolovka, Russian Federation
71.	<u>Dolzhenko A.S.</u> , Belyakov A.N.	EFFECT OF CARBON CONTENT ON THE STRENGTH OF HSLA STEELS AFTER TEMPFORMING	Belgorod State University, Belgorod, Russian Federation
72.	<u>Boitsova E.L.</u>	PHYSICO-CHEMICAL PROPERTIES OF NITROGEN-CONTAINING BIOCOATINGS BASED ON TITANIUM	Tomsk Polytechnic University, Tomsk, Russian Federation

73.	<u>Sokolovsky V.S.</u> , Salishchev G.A.	THE EFFECT OF MICROSTRUCTURE PARAMETERS ON STRENGTH AND DUCTILITY OF β -SOLIDIFIED γ -TiAl BASED ALLOY	Belgorod State University, Belgorod, Russian Federation
74.	<u>Torganchuk V.</u> , Dolzhenko P., Belyakov A., Kaibyshev R.	EFFECT OF AUSTENITIZATION TEMPERATURE AND TIME ON THE MECHANICAL PROPERTIES OF A CARBON STEEL	Belgorod State University, Belgorod, Russian Federation
75.	Matsinova A.D., <u>Mishnev R.V.</u> , Dudova N.R.	EFFECT OF HIGH TEMPERATURE TEMPERING ON CREEP BEHAVIOR OF A 10% Cr MARTENSITIC STEEL	Belgorod State University, Belgorod, Russian Federation