

POSTER SESSION

15:00-16:00 – Wednesday, May, 16, 2018

1. **M. I. Alymov, S. G. Vadchenko, and I. S. Gordopolova**
INFLUENCE OF ALUMINUM ADDITIVES ON IGNITION OF
TUNGSTEN/TEFLON POWDER MIXTURE
2. **M. I. Alymov, S. G. Vadchenko, I. S. Gordopolova, and
I. V. Saikov**
EFFECT OF MECHANICAL ACTIVATION ON THE THERMAL
AND SHOCK-WAVE INITIATION OF THE REACTION BETWEEN
REFRACTORY METALS AND TEFLON
3. **A. F. Belikova, S. N. Buravova, and E. V. Petrov**
FEATURE OF FORMATION OF LOCALIZED DEFORMATION
BANDS UPON PULSE LOADING
4. **V. N. Borshch and I. M. Dement'eva**
ZSM-5 SUPPORTED CATALYSTS PRODUCED BY LOW-
TEMPERATURE COMBUSTION
5. **V. N. Borshch, E. V. Pugacheva, S. Ya. Zhuk, V. N. Sanin,
D. E. Andreev, and V. I. Yukhvid**
STRUCTURE FEATURES OF SHS INTERMETALLICS AS
PRECURSORS FOR HIGHLY ACTIVE POLYMETALLIC CATALYSTS
6. **S. N. Buravova, E. V. Petrov, N. I. Mukhina, and A. S. Shchukin**
DISSOLUTION OF STRENGTHENING PHASE PARTICLES IN THE
LOCALIZED DEFORMATION BANDS
7. **S. V. Dudin, V. A. Sosikov and S. I. Torunov**
EXPLOSIVE LABORATORY INSTALLATION FOR CYLINDRICAL
COMPRESSION
8. **V. I. Goltsev, E. G. Grigor'ev, N. A. Gribov, L. A. Degadnikova,
V. Osintsev, and A. S. Plotnikov**
INVESTIGATION OF STRENGTH OF MATERIALS OBTAINED BY
ELECTRIC PULSE CONSOLIDATION OF POWDERS
9. **R. D. Kapustin, I. V. Denisov, and I. V. Saikov**
EXPLOSION WELDING OF Al + Cu BIMETALLIC JOINTS FOR
ELECTRICAL CONTACTS

10. **S. V. Konovalikhin, V. I. Ponomarev, D. Yu. Kovalev, and S. A. Guda**
MONOCLINIC BORON CARBIDE FROM SHS
11. **D. Yu. Kovalev and V. I. Ponomarev**
DIAGNOSTICS OF SHS: TIME RESOLVED X-RAY DIFFRACTION METHOD
12. **M. Kowalski, M. Böhm, and A. Kurek**
NUMERIC SIMULATIONS OF THE STEEL-ALUMINIUM TRANSITION JOINT UNDER MONOTONIC LOADING
13. **P. M. Krishenik, S. V. Kostin, N. I. Ozerkovskaya, and K. G. Shkadinskii**
THE UNSTEADY CELLULAR MODES OF FILTRATION COMBUSTION
14. **O. N. Kryukova and A. G. Knyazeva**
THE FORMATION OF COATINGS USING SYNTHESIZED MODIFYING POWDERS AND THE ENERGY OF ELECTRON BEAM
15. **M. Künzel and P. Nesvadba**
ON THE APPLICATIONS OF PHOTONIC DOPPLER VELOCIMETRY
16. **V. V. Kurilkin, I. V. Saikov, A. Yu. Malakhov, and A. A. Berdychenko**
APPLICATION OF THE VANADIUM BARRIER LAYER IN STEEL-TITANIUM BIMETAL IN HIGH TEMPERATURE CONDITIONS
17. **T. Mahiko, Y. Hidaka, D. Ishimoto, Y. Kishino, T. Kouuchi, and T. Ina**
INTRODUCING DAICEL'S ACTIVITIES RELATED TO DETONATION NANODIAMONDS
18. **A. Yu. Malakhov, I. V. Saikov, and P. A. Nikolaenko**
FEATURES OF HIGH-RATE DEFORMATION OF COPPER-TITANIUM RODS DURING EXPLOSION WELDING
19. **P. A. Miloserdov, V. A. Gorshkov, V. I. Yuxhvid, and O. M. Miloserdova**
INVESTIGATION OF THE $\text{CaCrO}_4/\text{TiO}_2/\text{Al}/\text{C}$ SYSTEM FOR THE PRODUCTION OF TITANIUM-CHROMIUM CARBIDE BY SHS METALLURGY METHOD

20. **E. I. Patsera, V. V. Kurbatkina, E. A. Levashov, and N. A. Kochetov**
SYNTHESIS OF SUPERREFRACTORY SOLID SOLUTIONS BASED ON BORIDES OF ZIRCONIUM, HAFNIUM AND TANTALUM
21. **E. I. Patsera, V. V. Kurbatkina, E. A. Levashov, S. A. Vorotilo, and N. A. Kochetov**
INFLUENCE OF MECHANICAL ACTIVATION PARAMETERS ON MA-SHS OF TaC-BASED SINGLE-PHASE SUPER-REFRACTORY SOLID SOLUTIONS
22. **E. V. Petrov and V. S. Trofimov**
FORMATION OF GRADIENT STRUCTURES OF FUNCTIONAL COATINGS AFTER THE IMPACT OF HIGH-SPEED PARTICLES FLOW
23. **A. Yu. Potanin, I. V. Yatsuk, Ph. V. Kiryukhantsev-Korneev, Yu. S. Pogochev, N. V. Shvindina, A. V. Novikov, and E. A. Levashov**
APPLICATION OF SHS FOR PRODUCTION OF ADVANCED Me(IV-VI)-Si-B CERAMICS FOR PVD OF HIGH-TEMPERATURE PROTECTIVE COATINGS
24. **V. N. Sanin, D. M. Ikornikov, D. E. Andreev, S. V. Zherebtsov, and V. I. Yukhvid**
SYNTHESIS OF CAST CoCrFeNiMn-BASED HIGH-ENTROPY ALLOYS AND COATINGS OF THEM BY CENTRIFUGAL METALLOTHERMIC SHS
25. **V. V. Sanin, M. R. Filonov, Yu. A. Anikin, D. M. Ikornikov, and V. I. Yukhvid**
PREPARATION OF 70Cu-30Fe ALLOY BY SHS METALLURGY AND SUBSEQUENT MECHANICAL HEAT TREATMENT
26. **V. V. Sanin, M. R. Filonov, E. A. Levashov, Y. S. Pogochev, V. I. Yukhvid, and D.M. Ikornikov**
NiAl-BASED ALLOY BY SHS METALURGY AND SUBSEQUENT REMELTING AND CASTING IN STEEL PIPE
27. **B. S. Seplyarskii, R. A. Kochetkov, and T. G. Lisina**
REGULARITIES OF SYNTHESIS OF NICKEL-BONDED TITANIUM CARBIDE FROM DIFFERENT TITANIUM GRADES

28. **B. S. Seplyarskii, R. A. Kochetkov, and T. G. Lisina**
THE INFLUENCE OF GAS FLOW ON THE MANIFESTATION OF
THE PERCOLATION PHASE TRANSITION IN GRANULAR
MIXTURES Ti + C
29. **V. A. Shcherbakov and A. N. Gryadunov**
POSSIBILITY OF PREPARATION Ta₄ZrC₅-CrB AND Ta₄HfC₅-CrB
COMPOSITES BY SHS PRESSING
30. **A. S. Shchukin, S. G. Vadchenko, A. V. Shcherbakov,
A. E. Sytshev, V. A. Shcherbakov, and A. N. Svobodov**
ELECTRO-THERMAL EXPLOSION IN W-Ni-Al SYSTEM
31. **S. L. Silyakov, V. I. Yukhvid, T. I. Ignat'eva, N. V. Sachkova,
N. Yu. Khomenko, A. F. Belikova, and P. A. Miloserdov**
REGULARITIES OF COMBUSTION AND CHEMICAL
CONVERSION OF A WO₃/Al/Ca/C MIXTURE
32. **K. L. Smirnov, E. G. Grigor'ev, and E. V. Nefedova**
SiAlON-BASED CERAMIC COMPOSITES FROM COMBUSTION-
SYNTHESIZED RAW MATERIALS BY SPARK PLASMA SINTERING
33. **S. Ustyukhin, A. B. Ankudinov, V. A. Zelenskii, and
M. Milyaev**
FUNCTIONAL PROPERTIES OF SINTERED POWDER Fe-Cr-Co
ALLOY OBTAINED BY LOW-TEMPERATURE SINTERING WITH
SUBSEQUENT HOT-ROLLING
34. **V. S. Vakin and E. L. Marushin**
MANUFACTURING AND TESTING OF BIMETALLIC BLANKS
FOR ITER PF1 COIL JOINTS
35. **V. A. Veretennikov and V. S. Trofimov**
INFLUENCE OF STRAIN RATE ON THE RATE OF CHEMICAL
TRANSFORMATION WITHIN A SHOCK WAVE
36. **V. A. Zelenskii, M. I. Alymov, A. G. Gnedovets, A. S. Ustyukhin**
CHROMIUM LOSS DURING VACUUM SINTERING OF IRON-
BASED ALLOYS
37. **W. Żórawski, M. Makrenek, A. Góral, and S. Kowalski**
APPLICATION OF THE IDENTATION METHOD TO THE
EVALUATION OF TITANIUM STRUCTURES