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Sergey V. Belim, Elizaveta V. Trushnikova

Dostoevsky Omsk State University, Omsk, Russia COMPUTER MODELING OF PHASE TRANSITIONS OF SEMIBOUNDED ANTIFERROMAGNETS (IoP)

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Dostoevsky Omsk State University, Omsk, Russia

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V P Belyaev, S V Mishchenko and P S Belyaev

Technological Institute, Tambov State Technical University, 106 Sovetskaya St, Tambov, 392000, Russia NON-DESTRUCTIVE TESTING METHOD FOR DETERMINING THE SOLVENT DIFFUSION COEFFICIENT IN THE POROUS MATERIALS PRODUCTS (IoP)

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PULSATION-BASED METHOD FOR REDUCTION OF NITROGEN OXIDES CONTENT IN TORCH COMBUSTION PRODUCTS (IoP)

A Ya Bigun¹, O A Sidorov², D S Osipov¹, S S Girshin¹, V N Goryunov¹ and E V Petrova¹

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Omsk State Technical University, 11, Mira ave., Omsk, 64450, Russia ELECTROINDUCTION DISK SENSOR OF ELECTRIC FIELD STRENGTH (IoP)

²Saratov State University named after Y.A. Gagarin, 77, Politekhnicheskay, Saratov 410054, Russian Federation

³ St. Petersburg University of NFFS of EMERCOM of Russia, St. Peterburg PROSPECTS OF USING MEDIUM-WAVE BAND FOR RADIO COMMUNICATION WITH RESCUE MOBILE TEAMS OF EMERCOM OF RUSSIA (IoP)

²Omsk State Transport University, Omsk, Russia

Y I Bityukov¹, Y I Deniskin¹ and G Y Deniskina¹

¹ Moscow Aviation Institute (national Research University) MAI, Moscow, Russia SPLINE WAVELETS USE FOR OUTPUT PROCESSES ANALYSIS OF MULTI-DIMENSIONAL NON-STATIONARY LINEAR CONTROL SYSTEMS (IoP)

K Blinov, S Galunin and Yu Blinov

St. Petersburg Electrotechnical University, St. Petersburg, Russia NUMERICAL MODELLING OF CYLINDRICAL COMPOSITE MATERIALS HEATING IN DYNAMIC MODES (IoP)

V N Blinov, I S Vavilov, V V Kositsin, A I Lukyanchik, V I Ruban and V V Shalay

Omsk State Technical University (OmSTU), 11, Mira ave., Omsk, 644050, Russian STUDY OF POWER-TO-WEIGHT RATIO OF THE ELECTROTHERMAL PROPULSION SYSTEM OF NANOSATELLITE MANEUVERING SATELLITE PLATFORM

A V Boikov, V A Payor and R V Savelev

Saint-Petersburg mining university, Saint-Petersburg, Russia
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BULK MATERIALS (IOP)

A. Borodin, S. Mirvoda, S. Porshnev and O. Ponomareva

*Ural Federal University, Yekaterinburg, Russia*IMPROVING GENERALIZED INVERTED INDEX LOCK WAIT TIMES (IoP)

R R Chernyateva

Ufa State Petroleum Technological University, Ufa, Russia DESIGN OF INSPECTION METHOD FOR CONTROL OF GAP DIMENSION BETWEEN REINFORCING RING AND VESSEL'S SURFACE (IoP)

R R Chernyateva

Ufa State Petroleum Technological University, Ufa, Russia EFFECT OF BAFFLE SPACING AND BAFFLE CUT ON THERMAL-HYDRAULIC CHARACTERISTICS OF THE FLUID FLOW (IoP)

IK Chernykh¹, EV Vasil'ev¹, EN Matuzko¹, EV Krivonos¹

Omsk State Technical University, 11, Mira ave., Omsk, 644050, Russia UPGRADING WELD QUALITY OF A FRICTION STIR WELDED ALUMINUM ALLOYS AMG6 (IoP)

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I E Demin¹ and A G Kozlov¹

Omsk State Technical University, Mira ave., 11, 644050, Omsk, Russia SELECTIVITY OF THE GAS SENSOR BASED ON THE 50% IN 203-50% GA203 THIN FILM IN DYNAMIC MODE OF OPERATION (IoP)

M Yu Drygin¹, N P Kuryshkin¹

¹ Department of information and automated manufacturing systems, T. F. Gorbachev Kuzbass State Technical University, 28 Vesennyaya street, 650000, Kemerovo, Russia DIAGNOSTICS OF HEAVY MINING EQUIPMENT DURING THE SCHEDULED PREVENTIVE MAINTENANCE (IoP)

M Yu Drygin¹, N P Kuryshkin¹

Department of information and automated manufacturing systems, T. F. Gorbachev Kuzbass State Technical University, 28 Vesennyaya street, 650000, Kemeroyo, Russia RAISING QUALITY OF MAINTENANCE AND CONTROL OF METALLIC STRUCTURES IN LARGE-LOAD TECHNOLOGICAL MACHINES (IoP)

M Yu Drygin¹, N P Kuryshkin¹

¹ Department of information and automated manufacturing systems, T. F. Gorbachev Kuzbass State Technical University, 28 Vesennyaya street, 650000, Kemerovo, Russia INCREASING THE QUALITY OF EXCAVATORS' PLANETARY REDUCTION GEARBOXES ON THE BASIS OF DIMENSIONAL ANALYSIS AND GEOMETRICAL CHARACTERISTICS OF TOOTH WHEELS (IoP)

O S Dyundik, I P Zgonnik

Omsk State Technical University, 11, Mira ave., Omsk, 644050, Russia DECREASE IN VIBROACTIVITY OF GEAR DRIVES (IoP)

Anton Eremeev^{1,3}, Mikhail Kovalyov² and Pavel Kuznetsov³

Sobolev Institute of Mathematics, Siberian Branch of Russian Academy of Sciences, Omsk, Russia ²United Institute of Informatics Problems, National Academy of Sciences of Belarus, Minsk, Belarus ³Omsk State University n.a. F.M. Dostoevsky, Omsk, Russia SINGLE PRODUCT LOT-SIZING ON UNRELATED PARALLEL MACHINES WITH NON-

DECREASING PROCESSING TIMES (IoP)

EN Eremin¹, A S Losev¹, S A Borodikhin¹, A E Matalasova¹, I A Ponomarev¹, K E Ivlev²

¹Omsk state technical university, Omsk, Russia

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ESTIMATION OF RESISTANCE TO DESTRUCTION OF MULTI-ELEMENT COATINGS (IoP)

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DETERMINATION OF CALORIFIC ABILITY OF FUEL BRIQUETTES ON THE BASIS OF OIL AND OIL SLIMES (IoP)

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CONTROL SYSTEM HIGH-PRECISION LASER TO OBTAIN THE ENSEMBLE OF ULTRACOLD IONS TH3+ (IoP)

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INTELLEGENT CONTROL SYSTEM FOR CONTINUOUS TECHNOLOGICAL PROCESS OF ALKYLATION (IoP)

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FEATURES OF ELECTRIC DRIVE SUCKER ROD PUMPS FOR OIL PRODUCTION (IoP)

Vladimir I Gorbunkov, Valery V Kositsin, Victor I Ruban and Victor V Shalav

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MULTICOMPONENT ARCJET PLASMA PARAMETERS (IoP)

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INFLUENCE OF WINDING CONSTRUCTION ON STARTER-GENERATOR THERMAL PROCESSES (IoP)

F R Ismagilov, V Ye Vavilov, V V Ayguzina

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A V Ivanov, I L Reva, D S Kofanov

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Novosibirsk State Technical University, 20, Karla Marksa ave., Novosibirsk, 630073, Russia INFLUENCE OF PRIMARY ELEMENTS PARAMETERS ON RESULT OF VOICE INFORMATION PROTECTION ESTIMATION (IoP)

A.V. Ivanov, Reva I.L., Shemshetdinova E.E.

Novosibirsk State Technical University, Novosibirsk, Russia INVESTIGATION OF INFLUENCE OF SPEECH SPECTER DIFFERENCES ON INTELLIGIBILITY ESTIMATION RESULTS (IoP)

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Vyatka State University, 11, Moskovskaya street, Kirov, 610000, Russia INCREASING OPERATIONAL LIFE OF BRUSH-CONTACT DEVICE IN THE TURBINE GENERATOR DUE TO USING LUBRICATING MOLYBDENUM DISULPHIDE BRUSHES (IoP)

I A Kirovskaya¹, E V Mironova¹, D A Polonyankin¹, S N Pogodin¹, L V Novgorodtseva¹, A I Blesman¹, S A Korneev¹ and Yu I Matyash²

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I A Kirovskaya, E V Mironova, I V Umansky, O Yu Brueva, A O Murashova and A V Yureva

¹Omsk State Technical University, Omsk, Russian Federation MECHANOCHEMICAL ACTIVATION AND GALLIUM AND INDIAARSENIDES SURFACE CATALYCITY (IoP)

I A Kirovskaya¹, E V Mironova¹, O V Ushakov¹, P E Nor¹, A V Yureva¹ and Yu I Matyash²

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ANALYSIS OF PARAMETERS FOR TECHNOLOGICAL EQUIPMENT OF PARALLEL KINEMATICS BASED ON RODS OF VARIABLE LENGTH FOR PROCESSING ACCURACY ASSURANCE (IoP)

VA Komarov¹, NN Nigrey², DA Bronnikov¹ and AA Nigrey¹

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S.V. Komkova

Murom Institute (branch) or the Federal State Budget Institution of Higher Professional Education "Vladimir State University Alexander G. and Nicholai G. Stoletovs, Murom, Russia THE PROCEDURE FOR ISOLATION OF NEOPLASMS ON THE RETINA OF THE EYE (IoP)

A.A. Komlev, S.A. Makeev

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THE CALCULATION OF RECTANGULAR PLATES ON ELASTIC FOUNDATION THE FINITE DIFFERENCE METHOD (IoP)

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²Yuri Gagarin State Technical University of Saratov, 77 Politechnicheskaya St., Saratov, 410054, Russia HYDROELASTIC OSCILLATIONS OF A CIRCULAR PLATE, RESTING ON WINKLER FOUNDATION (IoP)

S G Konesev¹, R T Khazieva¹, R V Kirillov¹, I Z Gainutdinov², E Y Kondratyev³

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PA Korchagin, IA Teterina and LF Rahuba

²Siberian state automobile and highway University, Omsk, Russia MORTISE TERRORISM ON THE TRUNK THE PIPELINE (IoP)

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Siberian State Automobile and Highway University, 5 Mira pr., Omsk, 644080, Russia IMPROVEMENT OF HUMAN OPERATOR VIBROPROTECTION SYSTEM IN THE UTILITY MACHINE (IoP)

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RATIONALE CHOOSING INTERVAL OF A PIECEWISE-CONSTANT APPROXIMATION OF INPUT RATE OF NON-STATIONARY QUEUE SYSTEM (IoP)

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ELECTRICAL ENGINEERING UNIT FOR THE REACTIVE POWER CONTROL OF THE LOAD BUS AT THE VOLTAGE INSTABILITY (IoP)

A.G. Kozlov, E.A. Fadina

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St. Petersburg Electrotechnical University, St Petersburg, Russia DYNAMIC CHARACTERISTICS OF NUMERICAL SYSTEMS FOR INDUCTION SURFACE HEATING (IoP)

Sergey Kratov

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ON PROVIDING THE FAULT-TOLERANT OPERATION OF INFORMATION SYSTEMS BASED ON OPEN CONTENT MANAGEMENT SYSTEMS (IoP)

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²Radio Engineering Faculty, Omsk State Technical University, Omsk, Russia ASSESMENT OF CHARACTERISTIC FUNCTION MODULUS OF VIBROACOUSTIC SIGNAL GIVEN A LIMIT STATE PARAMETER OF DIAGNOSED EQUIPMENT (IoP)

street, Saratov 410054, Russian Federation METHODOLOGICAL ASPECTS OF FUEL PERFORMANCE SYSTEM ANALYSIS AT RAW HYDROCARBON PROCESSING PLANTS (IoP)

S A Kurguzov, U V Mikhailova and O B Kalugina

Nosov Magnitogorsk State Technical University, Magnitogorsk, Russia MANUFACTURE OF CONICAL SPRINGS WITH ELASTIC MEDIUM TECHNOLOGY IMPROVEMENT (IoP)

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REDUCTION OF DYNAMIC LOADS IN MINE LIFTING INSTALLATIONS (IoP)

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THREE DIMENSIONAL MOVEMENT CONTROL SYSTEM APPLYING CBR-TECHNOLOGY (IoP)

O N Kuzyakov, U V Lapteva and M A Andreeva

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ELECTRONIC-PROJECTING MOIRE METHOD APPLYING CBR-TECHNOLOGY (IoP)

E V Leun¹, V I Leun², V K Sysoev¹, K A Zanin¹, A V Shulepov³ and P A Vyatlev¹

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²Omsk State Technical University, 11 Prospekt Mira, Omsk, 644050, Russia

³Moscow State Technological University «STANKIN», 11 Vadkovsky pereulok, Moscow, 127055, Russia THE ACTIVE CONTROL DEVICES OF THE SIZE OF PRODUCTS BASED ON SAPPHIRE MEASURING TIPS WITH THREE DEGREES OF FREEDOM (IoP)

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THE BASIC PRINCIPLES AND METHODS OF THE SYSTEM APPROACH TO COMPRESSION OF TELEMETRY DATA (IoP)

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RESEARCH OF PASTE TRANSITION TO SUBSTRATE IN LTCC-TECHNOLOGY (IoP)

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UTILIZATION OF VARIABLE CONSUMPTION BIOFUEL IN DIESEL ENGINE (IoP)

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PETROLEUM DIESEL FUEL AND LINSEED OIL MIXTURES AS ENGINE FUELS (IoP)

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PTFE-NANOCOMPOSITES STRUCTURE AND WEAR-RESISTANCE CHANGING IN VARIOUS METHODS OF STRUCTURAL MODIFICATION (IoP)

V V Mikheyev1 S V Saveliev2

10msk State Technical University, 11, Mira ave., Omsk, 644050, Russia 2Siberian state road and highway university, 5/2, Mira ave., Omsk, 644080, Russia MODELLING OF DEFORMATION PROCESS FOR THE LAYER OF ELASTOVISCOPLASTIC MEDIA UNDER SURFACE ACTION OF PERIODIC FORCE OF ARBITRARY TYPE (IOP)

N Minakova, I Petrov

Altai State University, Barnaul, Russia

MODELING AND PROTOTYPING OF BIOMETRIC SYSTEMS USING DATAFLOW PROGRAMMING (IoP)

L I Mogilevich¹, V S Popov¹, A A Popova¹ and A V Christoforova²

¹Yuri Gagarin State Technical University of Saratov, 77 Politechnicheskaya Street, Saratov, 410054, Russia

² Saratov State University, 83 Astrakhanskaya Street, Saratov, 410012, Russia MATHEMATICAL MODELING OF HYDROELASTIC OSCILLATIONS OF THE STAMP AND THE

PLATE, RESTING ON PASTERNAK FOUNDATION (IoP)

A N Mrakin¹, A A Selivanov¹, P A Batrakov² and D G Sotnikov¹

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²Omsk State Technical University, 11, Mira Pr., Omsk 644050, Russian Federation THE CHEMICAL ENERGY UNIT PARTIAL OXIDATION REACTOR OPERATION SIMULATION MODELING (IoP)

A S Nikiforov, E V Prihodko, A K Kinzhibekova, A E Karmanov

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THE PROCEDURE FOR DETERMINING THE RESIDUAL LIFE OF HIGHTEMPERATURE AGGREGATES (IoP)

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ANALYSIS OF THE STRESS-DEFORMED CONDITION OF THE DISASSEMBLY PARABOLIC ANTENNA (IoP)

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TIME FACTOR IN THE THEORY OF ANTHROPOGENIC RISK PREDICTION IN COMPLEX DYNAMIC SYSTEMS (IoP)

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I.V. Papkova¹, A.V. Krysko^{1,2}, O.A. Saltykova^{1,2}, A.A. Zakharova², V.A. Krysko¹

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CONTACT INTERACTION OF FLEXIBLE TIMOSHENKO BEAMS WITH SMALL DEFLECTIONS

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METHOD OF TRANSMISSION OF DYNAMIC MULTIBIT DIGITAL IMAGES FROM MICRO-UNMANNED AERIAL VEHICLES (IoP)

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ANALYSIS OF PRE-HEATED FUEL'S COMBUSTION AND HEAT-EMISSION DYNAMICS IN A DIESEL ENGINE (IoP)

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SYNTHESIS AND SURFACE PHYSICOCHEMICAL PROPERTIES OF (CDTE)0.03(ZNSE)0.97 SOLID SOLUTION (IoP)

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RESEARCH OF THREAD ROLLING ON DIFFICULT-TO-CUT MATERIAL WORKPIECES (IoP)

S.V. Porshnev, A.O. Bobkova, V.V. Zyuzin, A.A. Mukhtarov, M.A. Chernyshev, D. M. Akhmetov Department of Information Technology and Automation UrFU, IRIT-RTF Yekaterinburg, Russia AUTOMATIC SYSTEM FOR ESTIMATING THE VOLUME OF THE LEFT VENTRICLE BASED ON TWO-DIMENSIONAL MRI IMAGES OF THE HEART ALONG THE LONG AXIS (IoP)

F N Pritykin and V I Nebritov

Omsk State Technical University, 11, Mira ave., Omsk, 644050, Russia CONTENT AND STRUCTURE OF KNOWLEDGE BASE USED FOR VIRTUAL CONTROL OF ANDROID ARM MOTION IN SPECIFIED ENVIRONMENT (IoP)

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Vladimir State University named after Alexander and Nikolay Stoletovs, Vladimir, Russia USING FUZZY FRACTAL FEATURES OF DIGITAL IMAGES FOR THE MATERIAL SURFACE ANALISYS (IoP)

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PREVENTION OF UNORGANIZED EMISSIONS OF AMMONIA IN INSTALLATIONS OF DEWAXING OF OILS (IoP)

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DYNAMICS ANALYSIS IN THE DESIGN OF TURBOMACHINERY USING SENSITIVITY COEFFICIENTS (IoP)

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INVESTIGATION OF MISTUNING IMPACT ON VIBRATION OF ROTOR BLADED DISKS (IoP)

IS Rizaev, DI Miftakhutdinov and EG Takhavova

Kazan National Research Technical University named after A.N.Tupolev-KAI, Kazan, Russia SOLUTION OF THE PROBLEM OF SUPERPOSING IMAGE AND DIGITAL MAP FOR DETECTION OF NEW OBJECTS (IoP)

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THE DYNAMIC IMPROVEMENT METHODS OF ENERGY EFFICIENCY AND RELIABILITY OF OIL PRODUCTION SUBMERSIBLE ELECTRIC MOTORS (IoP)

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THE TECHNIQUES OF QUALITY OPERATIONS COMPUTATIONAL AND EXPERIMENTAL RESEARCHES OF THE LAUNCH VEHICLES IN THE DRAWING-BOARD STAGE (IoP)

IN Sachkov, VF Turygina, AN Dolganov

Department of System Analysis and Decision Making, GSEM, UrFU, Yekaterinburg, Russia KINETIC SYNERGISTIC TRANSITIONS IN THE OSTWALD RIPENING PROCESSES (IoP)

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CHAOTIC DYNAMICS OF TWO BEAMS DESCRIBED BY THE KINEMATIC HYPOTHESIS OF THE THIRD APPROXIMATION IN THE CASE OF SMALL CLEARANCE (IoP)

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APPROACH TO OPERATIONAL EXPERIMENTAL ESTIMATION OF STATIC STRESSES OF ELEMENTS OF MECHANICAL STRUCTURES (IoP)

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RESEARCH RESULTS OF STRESS-STRAIN STATE OF CUTTING TOOL WHEN AVIATION MATERIALS TURNING (IoP)

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DEVELOPMENT OF UNAUTHORIZED AIRBORNE EMISSION SOURCE IDENTIFICATION PROCEDURE (IoP)

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GEOMETRIC PARAMETERS DETERMINATION OF THE INSTALLATION FOR OIL-CONTAMINATED SOILS DECONTAMINATION IN RUSSIA, THE SIBERIAN REGION AND THE ARCTIC ZONES CLIMATIC CONDITIONS WITH REAGENT ENCAPSULATING (IoP)

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IMPROVEMENT OF HEAT AND MASS TRANSFER PROCESS, A MIXTURE OF METHANE AND BLAST FURNACE GAS (IoP)

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IMPROVEMENT OF AUTOMATIC CONTROL SYSTEM FOR HIGH-SPEED CURRENT COLLECTORS (IoP)

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GAS SENSITIVITY OF POLYMERIC COMPOSITES WITH CARBON NANOTUBES (IoP)

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VACUUM BOILERS DEVELOPED HEATING SURFACES TECHNIC AND ECONOMIC EFFICIENCY EVALUATION (IoP)

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INVESTIGATION OF THE INFLUENCE OF THE OPEN CELL FOAM MODELS GEOMETRY ON HYDRODYNAMIC CALCULATION (IoP)

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INVESTIGATION OF INTERNAL ELEMENTS IMPACTION ON PARTICLES CIRCULATION IN A FLUIDIZED BED REACTOR (IoP)

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COMPLEX RESEARCH OF VANADIUM DIOXIDE IN THE HOMOGINUITY FIELD (IoP)

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METHOD OF SECTIONS IN ANALYTICAL CALCULATIONS OF PNEUMATIC TIRES (IoP)

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ALGORITHMS FOR CONSTRUCTING OPTIMAL PATHS AND STATISTICAL ANALYSIS OF PASSENGER TRAFFIC (IoP)

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EXPERIMENTAL RESEARCH OF THERMAL LOADING OF THE ROCKET PAYLOAD FAIRING ELEMENT DURING THE ATMOSPHERIC PHASE OF THE DESCENT TRAJECTORY (IoP)

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THEORETICAL AND EXPERIMENTAL RESEARCHES OF THE LIQUID EVAPORATION DURING THERMAL VACUUM INFLUENCES (IoP)

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FINITE-ELEMENT ANALYSIS OF ELASTIC SOUND-PROOF COUPLING THERMAL STATE (IoP)

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RECOGNITION OF INCOMPLETE SEQUENCES USING FISHER SCORES AND HIDDEN MARKOV MODELS (IoP)

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PORTABLE DATA COLLECTION TERMINAL IN THE AUTOMATED POWER CONSUMPTION MEASUREMENT SYSTEM (IoP)

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TECHNICAL AND ECONOMIC ASSESSMENT OF DESIGN EFFICIENCY OF INFORMATION AND MEASURING SYSTEMS (IoP)

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THE INVESTIGATION OF SOCIAL NETWORKS BASED ON MULTI-COMPONENT RANDOM GRAPHS (IoP)

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BUILDING AN AUTHORIZATION MODEL FOR EXTERNAL MEANS OF PROTECTION OF APCS BASED ON THE INTERNET OF THINGS (IoP)

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FIBER-OPTICAL METHOD OF PYROMETRIC MEASUREMENT OF MELTS TEMPERATURE (IoP)

A A Zakharova, E V Vekhter, A V Shklyar and A J Pak

Department of EGID, Tomsk Polytechnic University, avenue of Lenin, 30, 634050, Tomsk, Russia VISUAL MODELING IN AN ANALYSIS OF MULTIDIMENSIONAL DATA (IoP)

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UPDATE OF THE EQUATIONS OF THE LIMIT STATE OF THE STRUCTURAL MATERIAL
WITH THE REALIZATION OF THEIR DEFORMATION (IoP)

L.S. Zimin, A.S. Yeghiazaryan, A.N. Protsenko

Samara state technical University, Samara, Russia DYNAMICS OF INDUCTORS FOR HEATING OF THE METAL UNDER DEFORMATION (IoP)

A M Zyuzev, M V Bubnov

Ural Federal University, Yekaterinburg, Russia MODEL FOR SUCKER-ROD PUMPING UNIT OPERATING MODES ANALYSIS BASED ON SIMMECHANICS LIBRARY (IoP)