

Part 1

VIRTUAL AND INTELLIGENT INFORMATION PROCESSING SYSTEMS IN SCIENCE AND TECHNOLOGY

Gulyaev P. V.

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Keywords: scanning tunneling microscopy, coordinate binding, characteristic point of the image, basis function, image shift and angle of rotation

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Keywords: neural networks, database, efficiency increase, fiberglass cores, test laboratories

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Keywords: measuring transducer, Poincare section, logistic map, chaotic oscillator

Beloserskich V. V., Patrushev E. M., Patrusheva T. V., Sedalichev V. N., Sergeeva Y. S.

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Keywords: coupled oscillations, physic-mechanical and tribological characteristics of surfaces of firm bodies and coverings, acoustic contact, static forces.

Ermolin K. S., Shelkovnikov Yu. K., Osipov N. I. INCREASING THE LOAD CAPACITY OF THE CIRCULATORS BASED ON OPERATING

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Keywords: circulator, operational amplifier, port, load, output power

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Keywords: inspection control, radiography, dual-energy method.

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Keywords: expert system, forecasting, a fuzzy time series, behavior pattern, the hybrid approach.

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Keywords: simulation, molecular dynamics, materials, particle systems.

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Keywords: driving style; Factors driving style; big data; cluster analysis, k-means.

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Keywords: information-measuring system, control, quality, pipes, fiberglass.

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Keywords: gas-dynamic calculation, polymer nonwoven, fiber, melt blowing.

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| Beloserskich V. V., Patrushev E. M., Patrusheva T. V., Sedalischev V. N., Sergeeva Y. S. RESEARCH THE POSSIBILITY OF CREATING MULTIFUNCTIONAL MEASURING TRANSDUCERS ON THE BASIS OF OSCILLATORY SYSTEMS WITH ONE DEGREE OF FREEDOM..... | 51 |
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Keywords: Coupled oscillations, physic-mechanical and tribological characteristics of surfaces of firm bodies and coverings, acoustic contact, static forces

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| Zrumov E. A., Zrumov P. A., Padalko V. S., Pronin S. P. RESEARCH VIBRATION PARAMETERS BRIDGE SPANS OF BRIDGE OVER THE OB RIVER WITH STROBOSCOPIC CONTROLS ON OPTICAL CONTRAST IN THE IMAGE OF THE TEST OBJECT..... | 58 |
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Keywords: vibration, control methods, optical contrast, stroboscopic effect.

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Keywords: bulk material moisture measurement, capacitive transducer electrical equivalent circuit, parallel processing, PLD.

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Keywords: coupled oscillations, sensor, viscosity, chaotic oscillator

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Keywords: concrete; compressive strength of concrete; random variable; distribution density; superposition of distributions.

Part 2

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Keywords: hybrid expert systems, neural networks, product rules, evaluation model of residential property

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Keywords: inclusive education, information communication technology, video course.

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Keywords: RPD, database, information system.

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Keywords: portfolio, electronic portfolio, the learning outcomes.

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Keywords: interactivity, lectures, presentations, training material.

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Keywords: water suspension, method of optical microscopy, lakes.

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Keywords: the fall of man, an accelerometer, an emergency call, PERS, acceleration.

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Keywords: artificial neural networks, technology immunosignature, classification of cancer.

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| Sutorikhin I. A., Bukaty V. I., Akulova O. B., Frolenkov I. M., Frolenkov O. M., Yankovskaya U. I. DAILY DYNAMICS OF HYDROOPTICAL AND HYDROBIOLOGICAL CHARACTERISTICS OF LAKE KRASILOVSKOE..... | 107 |
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Keywords: transparency, chlorophyll, index attenuation of light, lakes.

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| Kirillov A. I., Shelkovnikov E. Yu., Kiznertsev S. R. METROLOGICAL CHARACTERISTICS ANALYSIS FOR ELECTRO DIAGNOSTIC DEVICES FOR THE DIAGNOSIS OF THE DENTAL HARD TISSUES..... | 111 |
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Keywords: electro diagnosis, current source, voltage source, current-voltage converter, the internal resistance.

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Keywords: crystallization, clusters anglomeraty, the solubility of gases, air bubbles.

Part 5 VIRTUAL AND INTELLIGENT INFORMATION SECURITY SYSTEMS

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Keywords: PC software, automation, security system, information system of personal data

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Keywords: information security audit, information security, credit institution, standards, bank of Russia.

Part 6 VIRTUAL AND INTELLIGENT SYSTEM IN STUDENT WORKS

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Keywords: paving slabs, quality control, float-operated method, primary measuring converter.

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Keywords: private sector, ISP, wireless access, technology to connect to the Internet.

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Keywords: comparison algorithms, fingerprints, papillary pattern.

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The paper investigates the of different of virtualization technologies, their architecture and benefits of using

Keywords: virtualization technology, vm-ware, hyper-v, a monolithic architecture, microkernel architecture, the hypervisor.

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Keywords: propagation model Okamura-Hata, model
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The article is devoted to review of basic concepts and
definitions of the chaos theory, describes the
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dynamics and future prospects of their use in systems
of the transmission and processing of information
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Keywords: weak signal detection, noise, deterministic
chaos, chaos theory.

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in the processing of data sets and data protection.

Keywords: information security, intrusion detection,
artificial immune system.

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Keywords: membrane potential, permeability, ion
concentration, controls the germination of wheat
grains.

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Keywords: modeling, instrumentation.

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Keywords: LabVIEW, power supplies, measurement
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the computer via USB. Measurements showed the
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manufactured in-house transformer.

Keywords: a pulse transformer, the environment
LabVIEW, measurement error.