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All papers have been peer reviewed.
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Application of GPU and parallel programming on grid methods

Numerical research of the optimal control problem in the semi-Markov inventory model
Andrey K. Gorshenin, Vasily V. Belousov, Peter V. Shnourkoff and Alexey V. Ivanov

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On the deficiency of some estimators constructed from samples with random sizes
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Limit theorems for statistics with random sample sizes
M.E. Grigoryeva, Victor Yu. Korolev and Alexander I. Zeifman

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On order flow toxicity
A. Chertok

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Sherife Faydaoglu

Initial boundary value problems for mechanochemical corrosion of a thick spherical member in terms of principal stress
Olga S. Sedova and Yulia G. Pronina

On discontinuous Dirac systems with eigenvalue dependent boundary conditions
Etibar S. Panakhov and Tuba Gulsen

Numerical assessment of Dirac equation system by means of homotopy analysis method
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On spectral properties of a fourth-order boundary value problem with impulse
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Mohammed Farfour

Anisotropy investigation of a core image using the two-dimensional anisotropic wavelet transform
Said Gaci, Naima Zaourar, Yoon-Geun Jo and Dongshin Kim

Correction of steel casing effect for density log using numerical and experimental methods in the slim borehole
Seho Hwang, Byeongho Won, Jehyun Shin and Jongman Kim

Prestack reverse time migration for 3D marine reflection seismic data
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Application of resistivity monitoring to evaluate cement grouting effect in earth filled dam
Jin-Mo Kim and Wang-Jung Yoon

Mineral classification map using MF and SAM techniques: A case study in the Nohwa Island, Korea
Young-Sun Son and Wang-Jung Yoon

Experimental approaches for the development of gamma spectroscopy well logging system
Jehyun Shin, Seho Hwang, Jongman Kim and Byeongho Won
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Preface of the “Symposium on adaptive materials, devices and systems towards unconventional computing and robotics: Modeling and implementation”
Salvatore Iannotta and Victor Erokhin

Optimization of synthesis protocols to control the nanostructure and the morphology of metal oxide thin films for memristive applications

Hybrid slime mold - containing systems for unconventional computing
Tatiana Berzina, Alice Dimonte, Angelica Cifarelli and Victor Erokhin

Physics of the rupturing mechanism for HP memristor in flux mode
Jacopo Secco, Fernando Corinto and Marius Orlowski

Electrochemical model of polyaniline-based memristor with mass transfer step
V.A. Demin, V.V. Erokhin, P.K. Kashkarov and M.V. Kovalchuk

Organic memristive device as key element for neuromorphic networks
Victor Erokhin

Nanoengineered polymeric capsules for bio-computing
Svetlana Erokhina, Laura Pastorino, Vladimir Sorokin and Victor Erokhin

Material-based non-neural analogues of lateral inhibition: A multi-agent approach
Jeff Dale Jones

Alignment of liquid crystal/carbon nanotube dispersions for application in unconventional computing

Phoneme discrimination using a pair of neurons built from CRS fuzzy logic gates
Ondrej Šuch, Martin Klimo and Ondrej Škvarek

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Standard electromagnetically driven cosmology coupled with fermionic source
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The light rays analogue of a static black hole
E. Bittencourt, V.A. De Lorenci, R. Klippert, M. Novello and J.M. Salim

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   Petr Evgenevich Tovstik

Application of shell theories for simulation of intraocular pressure changes after injection
   Svetlana M. Bauer, Vladimir V. Kornikov and Eva B. Voronkova

Stiffened shell of minimal weight in buckling problems
   Sergei B. Filippov

Stress stage influence on diffusion process in materials
   D. Indeitsev and Yu. Mochalova

Numerical study of convergence of nonlinear models of the theory of shells with thickness decrease
   Sergey A. Kabrits and Eugeny P. Kolpak

Statics and dynamics of a rod under axial compression
   Aleksandr K. Belyaev, Nikita F. Morozov and Petr E. Tovstik

Elastic-plastic deformations of a beam with the SD-effect
   Galina V. Pavilaynen

On the applicability of thin spherical shell model for the problems of mechanochemical corrosion
   Yulia G. Pronina, Olga S. Sedova and Sergey A. Kabrits

Free vibrations of perforated thin plates
   Andrei Smirnov and Alexandr Lebedev

Vibrations of a floating beam on marine waves
   Valentin S. Sabaneev, Petr E. Tovstik, Tatiana M. Tovstik and Alexei S. Shekhovtsov

Two-dimensional model of plate made of anisotropic inhomogeneous material
   Petr E. Tovstik and Tatiana P. Tovstik

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   -SCLIT 2014-
   Zoran Budimac

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   Tomas Skersys, Saulius Pavalkis and Lina Nemuraite

Automated language symbolization and conceptualization in human - computer communication
   Ján Kollár
Application of the two-hemisphere model supported by BrainTool: Football game simulation
Oksana Nikiforova, Uldis Sukovskis and Konstantins Gusarovs

Iterative domain-specific language development with YAJCo parser generator
Poruban Jaroslav and Lakatos Dominik

Comprehensible presentation of clone detection results
Viktória Fördős and Melinda Tóth

Bringing together manual and automated code assessment
Ivan Pribela, Doni Pracner and Zoran Budimac

Specifying structural constraints of architectural patterns in the ARCHERY language
Alejandro Sanchez, Luis S. Barbosa and Daniel Riesco

Mobile app development in HTML5
Spyros Xanthopoulos and Stelios Xinogalos

Educational influences of choice of first programming language
Mirjana Ivanović, Zoran Budimac and Đura Paunić

Configure and refactor cloud applications with Enterprise Library Integration Pack for Microsoft Azure using Aspect.NET
Vladimir O. Safonov, Dmitry A. Grigoriev, Adel N. Safonova and Anastasiya V. Grigorieva

Introducing support for Erlang into SSQSA framework
Melinda Tóth, Attila Páter-Részeg and Gordana Rakić

Improvement of load balancing mechanism in multi-core architectures over high availability technique
Arsen Kurti, Igli Tafa and Aldi Disha

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Serdar Çelebi and Mine Çağlar

Exact analytical representation of fiber stress tensor based on angular integration (AI)
through cellular level probabilistic equations
Gürsan Çoban and M. Serdar Çelebi

High reynolds number hybrid RANS/LES modeling with turbulent time scale bounding
V.K. Krastev and G. Bella

Representing subgrid stress with cinlar velocity field in large eddy simulation
Rukiye Kara
### Numerical investigation of influence of leaflet calcification on aortic valve hemodynamics
Armin Amindari and Huseyin C. Yalcin

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Assist. Prof. Dr. Mehmet Tarik Atay

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Cahit Köme, Mehmet Tarik Atay, Aytekin Eryilmaz and Sure Köme

### Magnus expansion method for solving singularly perturbed turning point problems having boundary layers
Sure Köme, Mehmet Tarik Atay, Aytekin Eryilmaz and Cahit Köme

### SYMPOSIUM #32
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Ivan Kyrchei

### Higher order matrix differential equations with singular coefficient matrices
V.C. Fragkoulis, I.A. Kougioumtzoglou, A.A. Pantelous and A. Pirrotta

### SYMPOSIUM #33
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Carla M.A. Pinto and Cristina P. Santos

### Dynamic states of a unidirectional ring of chen oscillators
Ana Carvalho and Carla M.A. Pinto

### Effects of dynamic quarantine and nonlinear infection rate in a model for computer worms propagation
Carla M.A. Pinto

### Virus propagation in a SIQR model with impulse quarantine
Carla M.A. Pinto and Ana Carvalho

### Dynamics of coinfection of HIV/AIDS and tuberculosis with exogeneous reinfection
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Shashank Agrawal and Dineshkumar Harursampath 360002

Analysis of transverse shear strains in pre-twisted thick beams using variational asymptotic method
Maqsood M. Ameen and Dineshkumar Harursampath 360003

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Hemaraju Pollayi and Dineshkumar Harursampath 360005

Thermo-elastic failure simulation of 3-D orthotropic composites by XFEM
Himanshu Pathak, Ramesh Gupta Burela, Akhilendra Singh and Indra Vir Singh 360006

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