

Техника и технологии
Engineering & Technologies

Редакционный совет

академик РАН Е.А. Ваганов
академик РАН И.И. Гительзон
академик РАН А.Г. Дегерменджи
академик РАН В.Ф. Шабанов
чл.-корр. РАН, д-р физ.-мат. наук
В.Л. Миронов
чл.-корр. РАН, д-р техн. наук
Г.Л. Пашков
чл.-корр. РАН, д-р физ.-мат. наук
В.В. Шайдуров
чл.-корр. РАН, д-р физ.-мат. наук
В.В. Зуев

Editorial Advisory Board

Chairman:

Eugene A. Vaganov

Members:

Josef J. Gitelson
Vasily F. Shabanov
Andrey G. Degermendzhy
Valery L. Mironov
Gennady L. Pashkov
Vladimir V. Shaidurov
Vladimir V. Zuev

Editorial Board:

Editor-in-Chief:

Mikhail I. Gladyshev

Founding Editor:

Vladimir I. Kolmakov

Managing Editor:

Olga F. Alexandrova

Executive Editor for Engineering & Technologies:

Vladimir A. Kulagin

CONTENTS

Boris I. Borde

Network Services for Active Learning Computer Systems Design

— 629 —

Vasily A. Maistrenko and Vladimir V. Maistrenko

Carrying Out of Effective Recovery Algorithms of Distorted Images

— 636 —

Vasily S. Panko,

Yury P. Salomatov and Mikhail I. Sugak

Directional Characteristics of Circular Scanning Aperture

— 641 —

Sergey P. Panko,

Andrey V. Mishurov and Valentina G. Andyuseva

Method and Device for Compression of the Non Stationary Signals

— 648 —

Vitaly V. Sukhotin

Direction Finding in Satellite Systems

— 655 —

Aleksander S. Nikitin,

Aleksander M. Fen and Sergey I. Tregubov

Development of Electrical Wiring Automated Design Algorithm

— 660 —

Alexander F. Sidko, Irina Yu. Botvich,

Tamara I. Pisman and Anatoly P. Shevyrnogov

Angular Distribution of the Reflective Characteristics of Agrocenosis Ground Remote Sensing

— 665 —

Редактор И.А. Вейсиг Корректор Е.Г. Иванова

Компьютерная верстка Е.В. Гревцовой

Подписано в печать 27.09.2014 г. Формат 84х108/16. Усл. печ. л. 10,4.
Уч.-изд. л. 9,9. Бумага тип. Печать офсетная. Тираж 1000 экз. Заказ 2507.
Отпечатано в ПЦ БИК СФУ. 660041, Красноярск, пр. Свободный, 82а.

Editorial board for Engineering & Technologies:

Vladimir Kulagin – Series Editor, Siberian Federal University, Russia
Yury Alashkevich – Siberian State Technological University, Russia
Sereeter Batmönkh – Institute of Heat Engineering and Industrial Ecology Mongolian Academy of Sciences, Mongolia
Yuri Biba – Dresser-Rand Company, USA
Carsten Drebenstedt – Technische Universität Bergakademie Freiberg, Germany
Yury Galerkin – Saint Petersburg State Polytechnic University, Russia
Gennady Gritsko – Institute of Petroleum Geology and Geophysics Russian Academy of Sciences, Siberian Branch, Russia
Georg Guggenberger – Institute of Soil Science Leibniz University Hannover, Germany
Lev Endzhievsky – Siberian Federal University, Russia
Feng-Chen Li – School of Energy Science and Engineering Harbin Institute of Technology, China
Vladimir Makarov – Siberian Federal University, Russia
Aleksandr Mineev – Siberian Federal University, Russia
Vladimir Moskvichev – Special Designing and Technological Bureau “Nauka” Krasnoyarsk Scientific Center of the Russian Academy of Sciences, Siberian Branch, Russia
Bernard Nacke – Institute of Electrotechnology Leibniz University of Hannover, Germany
Oleksandr Nemchin – CEO of the State Research Institute of Innovative Technologies in Power Energy and Energy Efficiency of the Fuel and Energy Ministry of Ukraine, Ukraine
Valeriy Nikulin – Kamsk Institute of Humanitarian and Engineering Technologies, Russia
Oleg Ostrovski – University of New South Wales, Australia
Harald Oye – Norwegian University of Science and Technology, Norway
Vasili Panteleev – Siberian Federal University, Russia
Petr Polyakov – Siberian Federal University, Russia
Victor Timofeev – Siberian Federal University, Russia
Ibragim Khisameev – Kazan State Technological University, Russia
Anatoly Shvidenko – International Institute for Applied Systems Analysis, Austria
Galina Chiganova – Siberian Federal University, Russia

*Свидетельство о регистрации СМИ
ПИ № ФС77-28-722 от 29.06.2007 г.*

Серия включена в «Перечень ведущих рецензируемых научных журналов и изданий, в которых должны быть опубликованы основные научные результаты диссертации на соискание ученой степени доктора и кандидата наук» (редакция 2010 г.)

**Oleg V. Nepomnyashchy,
Alexander I. Legalov and Natalia J. Sirotinina**
High-Level Design Flows for VLSI Circuit
– 674 –

Andrei Yu. Krasnonosov
Mathematic Modeling Relationship Parameters of the Working Equipment and Energy Dig-ging Soil
– 685 –

**Nina G. Vasilovskaya,
Irina G. Endzhievskaya, Iliya G. Kalugin,
Sergei V. Druzhinkin and Galina M. Zeer**
Influence of Basalt Fibre on Foam Concrete Structure
– 689 –

Andrei L. Belousov and Tamara N. Patrushev
Electrochromic Oxide Materials
– 698 –

**Svetlana D. Garkavenko
and Anatoly M. Sazonov**
Features of a Geological Structure and Localization of ore of the Deposit of Gerfed
– 711 –

**Anatoly M. Sazonov, Viktor V. Onufrienok,
Yuriy V. Kolmakov and Natalya A. Nekrasova**
Pyrrhotite of Gold-Bearing Ores: Composition, Point Defects, Magnetic Properties, Gold Distribution
– 717 –

**Denis E. Egorov, Valery P. Dovgun,
Edouard A. Petrovsky and Viktor V. Novikov**
Electromagnetic Compatibility Issues on Power Systems in the Petroleum Industry
– 738 –

Vadim A. Zhukov
Ways to Reduce the Impact of High Attenuation in Sediments
– 749 –

СОДЕРЖАНИЕ

Boris I. Borde

Network Services for Active Learning Computer Systems Design

— 629 —

Vasily A. Maistrenko and Vladimir V. Maistrenko

Carrying Out of Effective Recovery Algorithms of Distorted Images

— 636 —

Vasily S. Panko,

Yury P. Salomatov and Mikhail I. Sugak

Directional Characteristics of Circular Scanning Aperture

— 641 —

Sergey P. Panko,

Andrey V. Mishurov and Valentina G. Andyuseva

Method and Device for Compression of the Non Stationary Signals

— 648 —

Vitaly V. Sukhotin

Direction Finding in Satellite Systems

— 655 —

Aleksander S. Nikitin,

Aleksander M. Fen and Sergey I. Tregubov

Development of Electrical Wiring Automated Design Algorithm

— 660 —

А.Ф. Сидько, И.Ю. Ботвич,

Т.И. Письман, А.П. Шевырногов

Угловое распределение отражательных характеристик агроценозов по наземным дистанционным измерениям

— 665 —

Oleg V. Nepomnyashchy,

Alexander I. Legalov and Natalia J. Sirotinina

High-Level Design Flows for VLSI Circuit

— 674 —

А.Ю. Краснонос

Математическое моделирование взаимосвязи параметров рабочего оборудования и энергоемкости копания грунта

— 685 —

Nina G. Vasilovskaya, Irina G. Endzhievskaya,

Iliya G. Kalugin, Sergei V. Druzhinkin and Galina M. Zeer

Influence of Basalt Fibre on Foam Concrete Structure

— 689 —

А.Л. Белоусов, Т.Н. Патрушева

Электрохромные оксидные материалы

— 698 —