## No 1 TECHNICAL ELECTRODYNAMICS 2009

## **CONTENTS**

Subject Categories: | | | | | | | | Theoretical electrical engineering and electrophysics

**Title:** The comparative analysis of analytical and numeral methods of computation of processes in a nonlinear electric circuit

Authors: SHIDLOVSKA N.A., SAMOILENKO V.G., KRAVCHENKO O.P., KUCHERJAVA I.M.

Source: Tekhnichna Elektrodynamika 1: 3-5, 2009

Title: Wave radial distribution of free electrons in a cylindrical conductor with an alternating

electric current

**Authors:** BARANOV M.I.

Source: Tekhnichna Elektrodynamika 1: 6–11, 2009

Subject Categories: | | | | | | | | | Electromechanical energy conversion

Title: Analysis of electromagnetic processes of an asynchronous motor at supply from an

autonomous current inverter with pulse-duration modulation

Authors: VOLKOV A.V., KOSENKO I.A.

Source: Tekhnichna Elektrodynamika 1: 12-19, 2009

Title: Computation of models of nonlinear electromechanical objects at polynomial recurrent

neural networks from their known mathematical models

Authors: ORLOVSKYI A.

Source: Tekhnichna Elektrodynamika 1: 20–31, 2009

**Title:** Research of non-synchronous switching on of generators into a network

Authors: LESNIK V.A., MAZURENKO L.I., FEDORENKO G.M.

Source: Tekhnichna Elektrodynamika 1: 32-34, 2009

Subject Categories: | | | | | | | | | Electric power systems and installations

Title: Estimation of interference of static characteristics of loads center and optimal decisions

of mathematical models of asymmetry reduction and voltage deviations

**Authors:** ZORIN V.V, BURBELO M.Y., VOLOTSKY A.M. **Source:** Tekhnichna Elektrodynamika 1: 35–37, 2009

**Title:** Trigatrons with operating voltage up to 1 MV with nanosecond operating time **Authors:** BOIKO N.I, EVDOSHENKO L.S., ZAROCHENTSEV A.I., IVANOV V.M.

Source: Tekhnichna Elektrodynamika 1: 38-43, 2009

Title: Computation of losses in a magnetic core steel of three-phase reactors at presence of

high harmonics of a magnetic flux

Authors: PENTEGOV I.V, RYMAR S.V.

Source: Tekhnichna Elektrodynamika 1: 44-52, 2009

**Subject Categories:**Bull Blectrotechnologyical complexes and systems

Title: Induction heating of a segmented lead of a power cable at the stage of its production

Authors: SHIDLOVSKY A.K., SCHERBA A.A., PODOLTSEV A.D., KUCHERJAVAJA I.N.,

ZOLOTARJEV V.M.

Source: Tekhnichna Elektrodynamika 1: 53-60, 2009

Title: MHD agitators of aluminum alloys with a pulsating magnetic field

Authors: FIKSSEN V.N., DUBODELOV V.I., GLUKHENKY A.I., GORISLAVETS Yu.M.

Source: Tekhnichna Elektrodynamika 1: 61–66, 2009

**Title:** Control characteristics of a sectionalized power supply source for electron-beam

technologies

Authors: RUDENKO Yu.V.

Source: Tekhnichna Elektrodynamika 1: 67–69, 2009

**Title:** Power supply devices of capacitive arc heaters for installations of wastes gasification

**Authors:** KOMAROV N.S.

Source: Tekhnichna Elektrodynamika 1: 70-76, 2009

**Title:** Ways and methods of improvement of electric arc welding plants

Authors: KHALIKOV V.A., LYPKIVSKY K.O., SHATAN O.F.

Source: Tekhnichna Elektrodynamika 1: 77-??, 2009

**Title: Abstracts** 

Source: Tekhnichna Elektrodynamika 3: ?-?, 2009

Institute of Electrodynamics, 2009