

1991, □ 2

CONTENTS

Electrodynamics of Electric Power Devices

Pivovarov L.V., Borisov P.B., Taranushenko S.A., Turchin A.P., Tikhonov A.P. Boundary

problem for axially symmetric channel of variable section with axis current in electrical

conduction medium

3

Burdak A.P., Glushkov E.A., Kuznetsova A.A., Reztsov V.F. Distribution peculiarities of electric

field on heterogeneities surface with non-linear conducting transition layer

8

Grimalsky O.V. Application of boundary integral equations for calculation of linear impedance

matrices and induced EMF for a system of extent conductors (bars) of optional
section_____ 15

Vaskovsky Yu.N., Dynnik L.N. Motion of electrical conduction axially symmetric body in pulsed

magnetic field of
solenoid_____ 22

Transformation of electrical energy parameters

Novoseltsev A.V. Extreme forms of free motion in electric
circuit_____ 29

Zhuravskaya I.A., Zakrevsky S.I. Determination of own parameters of transformer of output

stage of charging units of capacitive energy
storage_____ 33

Penin A.A. Projective – affine properties of resistive two-ports
load_____ 38

Koroteev A.E., Perekrest V.V. Stability analysis in big pulsed converters of constant voltage

with pulse-duration modulation of the first
kind_____42

Pyanyh B.E. Direct frequency converters with zone
control_____46

Ivanov A.V., Mulmenko M.M., Uzyanbaev A.H. Digital simulation of control system of multiload

installation with frequency regulated thyristor
converter_____50

Electromechanical energy conversion

Dartau A.A., Kozhevnikov V.A., Mitin V.V. Algorithm of electromagnetic calculation of

asynchronous engine with branched magnetic
circuit_____58

Shmatyuk N.P., Lysenko B.N., Marchenko A.V. Investigation of excitation process

of asynchronous turbo-generator with parallel operation_____
_____63

Antonyuk S.M., Fink A.F. Calculation optimization of synchronous regime of turbogenerators

operation by finite elements
method_____67

Kuevda V.P., Balyuta S.N., Tverdyakov V.V. Equivalent circuit diagrams of cryoturbo-generator

substitution with n rotor circuits_____71

Asanbaev V.N. Determination of massive rotor with a scheme of parameters substitution

accounting current displacement to teeth
periphery_____75

Mescheryakov V.N. Calculation of static characteristics of asynchronous electric motor

with non-linear inductive resistance in rotor
circuit_____81

Electric power systems and installations

Kuznetsov V.G. Problems of electric energy quality increase in power networks and systems____
84

Denisenko N.A., Hoffmann I. Stochastic simulation of short-circuit processes

in electric power systems and installations _____
 _____ 92

Nedzel'sky I.S. Simplification of power system mathematical model at static stability analysis _____ 98

Electric and magnetic measurements

Andrievsky E.A., Lesnik L.N., Lobunets Ya.I. Multifunctional magnetomentering system

for testing and calibration of high-power constant magnets
 _____ 103

Lezhoev R.S. Investigation of capacitive pickup of linear displacements with cylindrical coaxial

electrodes _____
 _____ 107

Scientific and technical information

Kononenko A.G., Latenko B.I., Masyurenko Yu.A., Nizhensky A.D. Light range finder _____ 1
_____ 12

Zakrevsky S.I., Golovach A.A. Current source for capacitive storage charge _____ 112
