

1992, □ 2

CONTENTS

Electrodynamics of electric power devices

Shakirov M.A., Kiyatkin R.P. Application of integrated equivalent circuits for critical waves

parameters in complex
waveguides _____ 3

Bespalov L.S., Metelsky V.P., Yarymbash S.T. Calculation of volumetric magnetic field of

transformer dissipation

Krischuk N.G., Aksenov V.A., Anisin A.M., Yarevsky Yu.A. Mathematical provision of ADS

insulators for electric fields calculation

12

Sotnikov V.V. External magnetic field of harmonic current distributed over the surface of a ring

20

Vovchienko A.I., Posokhov A.A., Shtompel I.V. Electric discharge processes in homogeneous

exothermal media on the basis of sodium perchlorate and ethanolamine perchlorate

26

Brzhezitsky V.A. Determination of diagonal coefficients at electric fields calculations by the

method of integral equations of the first kind

32

Electric energy parameters conversion

Volkov I.V., Zakrevsky S.I., Smolyansky I.I. Pulse currents generator on the basis of inducon

40

Danko A.V., Isamukhamedov Sh.T., Yadgarov A.H., Yaremenko L.V. Balancing conditions

of three-phase regime with non-linear asymmetrice
elements _____ 46

Electromechanical energy conversion ,

Lischenco A.I., Masurenko L.I. Analysis of self-excitation process of asynchronous valve

generator with transistor converter_____

52

Meleshko I.Yu. Transformer equipment optimization on economic specification_____

57

Kuevda V.P., Balyuta S.N. Electromagnetic loads calculation of rotor circuits of
cryoturbogenerator

at established asynchronous regimes by means of equivalent circuits_____

65

Verbovoi P.P., Agafonov A.I. Asynchronous motor model with massive ferromagnetic rotor

and short-circuited winding at supply from single-phase electric energy sources _____
_____ 70

Kidyba V.P., Shmatyuk N.P., Marchenko A.V., Tikhaya E.V. Investigationon a mathematical
model of output process into synchronous regime of asynchronized turbogenerators _____
_____ 76

Electric power systems and installations

Karpov S.A Simulation model for estimation of servicing probability of consumers

in power
systems _____
_83

Electric and magnetic measurements

Volkova E.D., Kononenko A.C., Latenko V.I., Masyurenko Yu.A., Nizhensky A.D. Accuracy

increase of phase shifts measurement In phase light range
finder _____ 89

Brigider V.O. Audiometering investigations and amplitude-frequency characteristics of linear

and non-linear electrical two-ports

97

Surdu M.N., Mikhal A.A., Izvolenskaya N.E. Conductivity-meter converter

101

Short reports

Ignatyev I.G. Electrostatic field influence on motion stability of charges conveyer

of electrostatic accelerator

105

Scientific and technical information

Udod E.I. Screening sets of special wear for work under voltage conditions in electrical

installations of 220...750 kV

108

Meleshko I.Yu., Shifrin L.N., Kanalyuk V.L. New block transformer In antiseismic design _____

109

Shidlovsky A.K., Komarov N.S., Kozlov A.V., Moskalenko G.A., Boiko P.S. Module of centralized

voltage stabilizer of electric supply systems with improved electromagnetic

compatibility MCS 700/500 _____

110