CONTENTS

Professor Aurel CAMPEANU at his 80th anniversary IX

Professor Grigore CIVIDJIAN at his 80th anniversary XI

Comparison of the Conservative Power Theory (CPT) with Budeanu's Power Theory – Leszek S. Czarnecki 1

Modeling and Torque Ripple Control in Faulty SPMSM – Elmehdi Bahri, Remus Pusca, Raphael Romary, Driss Belkhayat 9

Digital Control for the Air Pressure with Multi-Characteristics Selection – Dan Mihai 17

Study of the Reactive Power Side Effects for Tariff and Compensation Purpose at the Transmission Networks'Users – Leonardo Geo Mănescu, Denisa Ruşinaru, Marian Ciontu, Cosmin Buzatu, Eugen Butoarcă, Miron Alba 25

Evaluating RMS of Linearly Variable Magnitude Waveforms by Using FFT and WPT. Theory and Practice – Ileana-Diana Nicolae, Petre-Marian Nicolae, Diana Cristina Maria, Scărlătescu Lucian 33

On the Implementation of FBD-Theory Concepts in the Control of Active DC-Traction Substations – Mihaela Popescu, Alexandru Bitoleanu, Mircea Dobriceanu 39

New Aspects on the Frequency Splitting and Bifurcation Phenomena in Wireless Power Transfer Systems – Mihai Iordache, Andrei Marinescu, Ioana-Gabriela Sîrbu, Lucian Mandache, Dragoş Niculae, Lavinia Iordache 46

Power Control and Energetic Performances of an Induction Heating System Destined for Drying of Current Transformers – Alexandru Bitoleanu, Mihaela Popescu, Dinu Roxan Doboşeriu 54

Some Considerations Concerning Radiated Emissions Produced by a Board Display – Petre-Marian Nicolae, Ileana-Diana Nicolae, Relu-Adrian Aipu 60

Development of a Barrier Structure Actuated by Three Shape Memory Alloy Springs – Sonia Degeratu, Costel Cărămidă, Laurenţiu Alboteanu, Irina Boncea, Daniela Coman, Monica S. Stăicuş, Gabriela Tont 66

Energetic Analysis of the Drying Process of Cur-rent Transformers from 110 kV Ciungetu Power Station – Dinu Roxan Doboşeriu, Alexandru Bitoleanu, Mihaela Popescu 74

Improving the Power Quality and Controllability of PV Power Plants for Microgrids Integration – Luminiţa Barote, Corneliu Marinescu, Ioan Şerban, Daniel Munteanu 80

Simulation and Implementation of Sensorless Control Using Estimators in Electric Drives with High Dynamic – Marcel Nicola, Dumitru Sacerdoţianu, Adrian Hurezeanu 86

Monitoring and Analysis of the Electrical Parameters for an Industrial Consumer using LabVIEW Environment – Claudiu-Ionel Nicola, Viorica Voicu, Sebastian Popescu, Maria Cristina Niţu, Daniela Iovan, Marian Duţă, Alin Benea, Silviu Andreescu 94

Modeling and Simulation of the Coal Flow Control System for the Longwall Scraper Conveyor – Olimpiu Stoicuţă, Teodor Pană 101

Design and Simulation of Wireless Power Transfer Systems – Mihai Iordache, George Andronescu, Victor Bucată, Maria-Lavinia Iordache (Bobaru), Marilena Stăculescu, Dragoş Niculae 109

Small Scale Model of Automatic Barrier Powered by Photovoltaic Panel – Laurenţiu Alboteanu, Gheorghe Manolea, Alexandru Novac ……..... 115

Dynamic Regime Electromagnetic Torque in Brushless Direct Current Motors – Ion Vlad, Sorin Enache, Monica Adela Enache ……. 123

Enhancing the dynamic frequency of microgrids by means of PV power plants with integrated energy storage – Daniel Munteanu, Ioan Şerban, Corneliu Marinescu, Luminița Barote ……. 129

The Analysis of Magnetic Field Measurements in a Public Access Area – Georgiana Roşu, Octavian Baltag 135

Comparisons Among p - Channel, n-Channel and Mixed n/p Channel OTFTs – Cristian Ravari, Georgeta Alecu ……..... 141

On the Immunity of Data Acquisition Systems Used in Power Systems – Livia-Andreea Dina, Ileana-Diana Nicolae, Petre-Marian Nicolae, Dorina-Mioara Purcaru …… 147

Aspects of Behavior Regarding Certain Electronic Equipment Subject to Electrostatic Discharge – Mircea-Emilian Ardeleanu, Paul Nicoleanu ...……. 153

Load Flow Analysis of Unbalanced Distribution Networks using Symmetrical Components Based Software – Denisa Ruşinaru, Leonardo Geo Mănescu, Marian Ciontu, Miron Alba …… 159

Technical Aspects Regarding Electromagnetic Compatibility Compliance of the Electric and Electronic Integrated Systems – Stoica Dan, Cosereanu Liviu, Enache Mihai, Ploşniță Albert, Mazăre Petru …….. 168

Electromagnetic Shielding System for Information and Communication Equipments – Stoica Dan, Cosereanu Liviu, Enache Mihai, Boteanu Adina, Ploşniță Albert……. 173