

## Table of contents

### Signal processing and analysis

|  |           |
|--|-----------|
| <i>Katerina Saneva, Roza Aceska, Sanja Kostadinova</i><br><b>Asymptotic Behavior of Distributions and the Short-time Fourier Transform</b>   | <b>13</b> |
| <i>Costăchioiu Teodor, Niță Iulian, Lăzărescu Vasile, Datcu Mihai</i><br><b>Unsupervised Clustering of EO-1 ALI Panchromatic Data Using Multilevel Local Pattern Histograms and Latent Dirichlet Allocation Classification</b> | <b>25</b> |
| <i>Ewald Enzinger, Peter Balazs</i><br><b>Speaker Verification using Pole/Zero Estimates of Nasals</b>   | <b>33</b> |
| <i>Christian H. Kasess, Wolfgang Kreuzer</i><br><b>Vocal Tract Modeling: From Signal to Structure</b>  | <b>45</b> |
| <i>Tudor Marcel Cuda, Dumitru Stanomir, Cristian Negrescu</i><br><b>The Influence of Nonindividual Hrtf in Binaural Reproduction Using Headphones</b>  | <b>57</b> |
| <i>Branislav Dragović, Nenad Dj. Zrnić</i><br><b>A Queuing Model Study of Port Performance Evolution</b>   | <b>65</b> |

|   |            |
|---|------------|
| <i>Iulian Bătroș, Ovidiu Tomescu, Mihnea Beldescu</i><br><b>An Effective Trajectory Optimization Method for Autonomous Mobile Robot Conducted by GPS Positioning Using Kalman Filter Approach</b>   | <b>77</b>  |
| <i>Darian M. Onchiș, Mihail Găianu, Ovidiu Vasile</i><br><b>Pipeline Analyzer using the Fractional Fourier Transform for Engine Control and Satellites Data</b>   | <b>84</b>  |
| <i>Ioan Ion, Doina Frunzăverde, Viorel Câmpian, Adrian Cuzmoș, Cosmin Dumbravă</i><br><b>The Level of Calculation Errors in the Case of Using the Weibull Distribution for Estimating the Eolian Potential According to the Real Potential Based on Effective Measurements of the Weather Characteristics</b> | <b>91</b>  |
| <i>Cristian Paul Chioncel, Petru Chioncel, Nicoleta Gillich, Ovidiu Gelu Tirian</i><br><b>Wigner Ville Distribution in Signal Processing, using Scilab Environment</b>  | <b>101</b> |
| <i>Peter Balazs, Georg Rieckh</i><br><b>Oversampling Operators: Frame Representation of Operators</b>   | <b>107</b> |
| <b>Automation and control</b>   |            |
| <i>Ana Mihaela Andreica</i><br><b>Modern Solutions for Automation of Electrical Traction Power Supply Systems</b>   | <b>115</b> |
| <i>Florențiu Deliu, Gheorghe Samoilescu, Beazit Ali</i><br><b>Naval Power System Dynamics with Proportional Type Regulators</b>   | <b>123</b> |

|  |            |
|--|------------|
| <i>Florențiu Deliu, Gheorghe Samoilescu, Beazit Ali</i>  |            |
| <b>The Dynamics of Naval Power System with Integrator Proportional and Derivative Integrator Proportional Regulators</b> | <b>131</b> |
| <i>Ciprian Sandu, Paul Dan Cristea</i>   |            |
| <b>Improved Model for Blood Pressure Regulation in Post Cardiac Surgery Patients</b>                                     | <b>141</b> |
| <i>Ovidiu Tomescu, Vicente Ramón Tomás López, Florin Codruț Nemțanu, Iulian Bătros</i>                                   |            |
| <b>Traffic Signal Green-Wave Control Strategy Based on Divers' Behaviors</b>   | <b>146</b> |
| <i>Cristina Dragomir</i>   |            |
| <b>Improving Quay Cranes Exploitation by Implementing a Port Equipment Management System</b>                             | <b>157</b> |
| <i>Petru Junie</i>   |            |
| <b>Systems Structure Based on Wireless Sensor Networks for Monitoring the Transportation Pipelines of Oil and Gas</b>    | <b>163</b> |
| <i>Răzvan Ghiță</i>  |            |
| <b>Programming Methods for Road Traffic Control Video Applications</b>   | <b>169</b> |
| <i>Ana Maria Nicoleta Mocofan</i>  |            |
| <b>Urban Road Traffic Simulation Techniques</b>  | <b>181</b> |
| <i>Valentin Nedelea, Ladislau Augustinov, Gheorghe Liuba</i>   |            |
| <b>Rotor-Stator Air Gap Unevenness Influence on Vibrations in Operation of High Power Hydrogenerators</b>                | <b>193</b> |

|   |            |
|---|------------|
| <i>Valentin Nedelea, Ionel Dragomirescu, Augustinov<br/>Ladislau, Cosmin Laurian Ungureanu</i>  |            |
| <b>Ballast Load Control of Turbine-Generator Sets in the<br/>Micro-Hydro Range with a Turbine that has no Flow<br/>Regulating Value</b> | <b>201</b> |
| <i>Peter Lorenz, Valentina Ignat, Thomas Zielinski, Labinot<br/>Gashi, Sebastian Haffner, Immanuel Haffner</i>                          |            |
| <b>Edusta 2011. Data processed Expert System for the<br/>Evaluation of Mast Security</b>  | <b>209</b> |