

Universitatea din Craiova
Facultatea de Automatică, Calculatoare și Electronică
Departamentul de Automatică și Electronică
Conferențiar dr. ing. Prejbeanu Răzvan Gabriel

L I S T A

lucrărilor științifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

REGIMURILE DINAMICE SPECIFICE MOTORULUI ASINCRON DE TRACȚIUNE FERROVIARĂ

B. Cărți și capitole în cărți

- CIRCUITE INTEGRATE DIGITALE, Editura SITECH, ISBN 978-606-11-4826-4, CIP 2015-15774, Craiova, 2015, Răzvan Gabriel Prejbeanu

- *DIGITAL ELECTRONICS – LAB BASED ACTIVITY* –, Editura Universitaria, ISBN 978-606-14-1936-4, Craiova, 2023, CIP 2023-00462, Răzvan Gabriel Prejbeanu

C. Lucrări indexate ISI/BDI publicate

C 1. Articole în reviste cotate și în volumele unor manifestări științifice indexate ISI Proceedings

1. S. Enache, **R. Prejbeanu**, A. Campeanu, I. Vlad. Aspects regarding simulation of the saturated induction motors control by the voltage inverter commanded in current, *Proc. IEEE EUROCON 2007: The Int. Conference on Computer as a Tool*, pp. 613-616, 2007, Warsaw, Poland, ISBN 978-1-4244-0812-2. WOS:000257261900102 [ISI Proc.]
2. I.M. Popescu, B. Popa, **R. Prejbeanu**, C. Ionete. Evaluation of Parallel and Real-Time Processing Performance for Some Vibration Signals Using FPGA Technology. *Proc. 19th Int. Carpathian Control Conference (ICCC)*, 2018, ISBN: 978-1-5386-4762-2. WOS:000439260500069 [ISI Proc.]
3. L. Mandache, S. Ivanov, **R. Prejbeanu**, M. Roman, I.G. Sirbu, V. Ivanov, A. Radu. Reliable Time-Domain Analysis of Nonlinear Lumped Circuits with Topology Issues, Suitable for Transients of AC Drives, *Proc. Int. Conference on Electromechanical and Energy Systems (SIELMEN)*, art. 273, 2019, ISBN978-1-7281-4011-7. WOS:000630287500046 [ISI Proc.]
4. S. Ivanov, L. Mandache, V. Ivanov, A. Radu, M. Roman, **R. Prejbeanu**. Comparison of PWM Strategies for Three Level Inverters, *Proc. Int. Conference on Electromechanical and Energy Systems (SIELMEN)*, art. 239, 2019, ISBN978-1-7281-4011-7. WOS:000630287500001 [ISI Proc.]
5. **R. Prejbeanu**, I.M. Popescu. Modelling and Simulation of Autonomous Systems with Voltage Inverters, Output Filters and Asynchronous Motors, *Proc. 20th International Carpathian Control Conference (ICCC)*, Krakow-Wieliczka, Poland, 2019, DOI: 10.1109/CarpathianCC.2019.8766062, ISBN:978-1-7281-0701-1. WOS:000490570500005 [ISI Proc.]
6. **R. Prejbeanu**, I.M. Popescu. Intelligent and Suitable Transportation System with Asynchronous Motor and Li-Ion Battery. *Proc. 19th International Carpathian Control Conference (ICCC)*, 2018, ISBN: 978-1-5386-4762-2. WOS:000439260500114 [ISI Proc.]
7. **R. Prejbeanu**. Power Supply Control and Adaptation System for Plasma Discharge Equipment. *Proc. 23th International Carpathian Control Conference (ICCC)*, 2022. ISBN:978-1-6654-6636-3, DOI: 10.1109/ICCC54292.2022.9805928. WOS:000925203600048

8. D. Selișteanu, M. Roman, L. Mandache, **R. Prejbeanu**, S. Ivanov, A. Radu. Three-Level Inverter Control Techniques: Design, Analysis, and Comparisons, *Elektronika Ir Elektrotehnika*, Vol. 27, Issue 3, pp. 26-37, 2021, DOI: 10.5755/j02.eie.29015, ISSN 1392-1215. WOS:000668351900003
9. **R. Prejbeanu**. A Sensor-Based System for Fault Detection and Prediction for EV Multi-Level Converters, *Sensors*, 2023, 23(9), 4205; <https://doi.org/10.3390/s23094205>. WOS:000987894900001

C 2. Articole în reviste și volumele unor manifestări științifice indexate în alte baze de date internaționale (BDI)

1. A. Câmpeanu, M. Rădulescu, **R. Prejbeanu**, I. Caușil, T. Câmpeanu. Predetermination of Dynamical Stresses of Asynchronous Traction Motors, *Proc. ICEM, XIX International Conference on Electrical Machines*, September 6-8, 2010, Rome, Italy, DOI 10.1109/ICELMACH.2010.5608238.
2. **R. Prejbeanu**, A. Marinescu, D.O. Neagu, A. Radu, Optimizing parallel connection of Medium Frequency inverters for EV Wireless Charging. *Proc. 2019 Electric Vehicles International Conference (EV)*, pp. 1-6, DOI 10.1109/EV.2019.8892976
3. D. Selișteanu, E. Petre, **R. Prejbeanu**, I.M. Popescu, S. Mehedințeanu, Software solutions for simulation, monitoring and data acquisition in wastewater treatment plants, *Proc. of 21st International Carpathian Control Conference ICC'2020*, Oct. 27-29, 2020, Slovak Republic, ISBN: 978-1-7281-1951-9, doi: 10.1109/ICCC49264.2020.9257268.
4. **R. Prejbeanu**, M. Roman, V. Ivanov, A. Radu. Simulation and fault detection techniques for multilevel inverters used in smart grids, *Proc. of 21st International Carpathian Control Conference ICC'2020*, Oct. 27-29, 2020, Slovak Republic, ISBN: 978-1-7281-1951-9.
5. I.M. Popescu, D. Popescu, I. Voinea, B. Popa, **R. Prejbeanu**. A DFT Computation Method for the Real-Time Processing of Vibration Signals at FPGA Circuit Level, *Proc. of 21st International Carpathian Control Conference ICC'2020*, Oct. 27-29, 2020, Slovak Republic, ISBN: 978-1-7281-1951-9, DOI: 10.1109/ICCC49264.2020.9257281.
6. E. Tudor, A. Marinescu, **R. Prejbeanu**, A. Vintila, T. Tudorache, D.G. Marinescu, D.O. Neagu, I. Vasile, I.C. Sburlan. Electric bus platform for urban mobility, *IOP Conference Series: Earth and Environmental Science* 960 (1), 012022, DOI 10.1088/1755-1315/960/1/012022.
7. **R. Prejbeanu**. Self-Scanning System and Evaluation of Dynamic Electrical Performance of Electric Vehicles Using Different Control Systems, *Proc. of 24th International Carpathian Control Conference ICC'2023*, Jun. 12-14, 2023, Hungary, acceptată.

D. Lucrări publicate în reviste și volume de conferințe cu referenți (neindexate)

1. **R. Prejbeanu**, M. Rădulescu, C. Pătrașcu, J. Stăncioi. Electric locomotive tap-changer drive system using an ac motor, *International Conference on Automation, Quality and Testing, Robotics*, May 13-15, 2004, Cluj-Napoca;
2. F. Burdubuş, M. Rădulescu **R. Prejbeanu** Three-phase driving systems for tramways, *International Conference on Automation, Quality and Testing, Robotics*, May 13-15, 2004, Cluj-Napoca;
3. M. Rădulescu, **R. Prejbeanu**, V. Tulbure, M. Dobrin. Treatment of sliding phenomenon at the roumanian electric locomotives le 5100 Kw, *International Conference on Automation, Quality and Testing, Robotics*, May 13-15, 2004, Cluj-Napoca;
4. **R. Prejbeanu**, M. Rădulescu, A. Câmpeanu, C. Pătrașcu Optimal adaptable control system of traction asynchronous motors, *International Conference of Ship Propulsion and Railway Traction System*, 2005, Bologna, Italia;
5. A. Câmpeanu, M. Rădulescu, M. Bădică, **R. Prejbeanu**. Connection to weak electrical supply network of two synchronous machines operating in recovery regim, *XVII International Conference on Electrical Machines 2006*, Chania, Crete Island, ICEM 2006, Greece;

6. **R. Prejbeanu**, C. Pătrașcu, M. Rădulescu. HVAC - new equipment for railway coaches supplied from the main traction generator of the Diesel-electric locomotive, *International Conference on Power Electronics and Intelligent Control for Energy Conservation PELINCEC 2005*, Varșovia, Proceedings paper 145, indexată în baza de date European Power Electronics and Drives (<http://www.epe-association.org>);
7. C. Pătrașcu, **R. Prejbeanu**, M. Rădulescu. A digital signal processor controlled equipment, for traction motors voltage control, on some electric locomotives, *International Conference on Power Electronics and Intelligent Control for Energy Conservation PELINCEC 2005*, Varșovia, Proceedings paper 144, indexată în baza de date European Power Electronics and Drives (<http://www.epe-association.org>);
8. D. Chintescu, F. Panea, **R. Prejbeanu**, M. Rădulescu. Specific dynamic asynchronous motor fed by power converters, *Annals of the „Constantin Brâncuși” University of Târgu Jiu, Engineering Series*, Issue 3/2010,
9. **R. Prejbeanu**. Traction asynchronous motor fed by power converter controlled by direct torque control method, *Annals of the University of CRAIOVA, Series: AUTOMATION, COMPUTERS, ELECTRONICS and MECHATRONICS*, Issue 1/2014,
10. **R. Prejbeanu**. Method to reduce the harmonics generated in asynchronous motor fed by power converter, *Annals of the University of CRAIOVA, Series: AUTOMATION, COMPUTERS, ELECTRONICS and MECHATRONICS*, Issue 2/2014.

E. Brevete obținute în întreaga activitate

1. Brevet de invenție nr. 119011 (2004) SISTEM CU OSII MOTOARE, INDEPENDENTE ELECTRIC, PENTRU ACȚIONAREA UNOR LOCOMOTIVE ELECTRICE [OSIM], Electric locomotive independent electric drive axles assembly also serves the auxiliary apparatus via a rectifier, transformer and battery system, Derwent Primary Accession Number 2004-408330, Inventatori: Tapu D; Radulescu M; **Prejbeanu R**; Radulescu C; Mondea C; Matusa T; Radutoiu M
2. Brevet de invenție nr. 120830 (2006) INSTALAȚIE PENTRU ALIMENTAREA SISTEMULUI DE ÎNCĂLZIRE ELECTRICĂ ȘI CLIMATIZARE AL VAGOANELOR DE PASAGERI, DE LA GENERATORUL DE TRACȚIUNE AL UNEI LOCOMOTIVE DIESEL ELECTRICE [OSIM] Diesel electric generator based railway passenger carriages electric heating system has transistors and diodes also giving air conditioning of the carriages, Derwent Primary Accession Number 2006-811380, Inventatori: Popescu C; **Prejbeanu R. G**; Radulescu M; Stanculescu A; Docheru S.
3. Brevet de invenție nr. 130928 (2019) SISTEM INTEGRAT DE ALIMENTARE CU COMBUSTIBIL PENTRU LOCOMOTIVA DIESEL ELECTRICALDE 2100CP CE FUNCȚIONEAZĂ CU BIODIESEL PUR B100 [OSIM] Inventatori: Călin G. G. Bonci L. C., Sanda F. V., **Prejbeanu R. G.**

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