

Universitatea Tehnică din Cluj-Napoca
Facultatea de Inginerie
Departamentul de Inginerie Electrică, Electronică și Calculatoare
Șef lucrări dr. ing. Zoltan Erdei

LISTA DE LUCRĂRI

A. LISTA CELOR MAI RELEVANTE LUCRĂRI

1. Erdei Z; Horgos M; Grib A; Preradovic DM; Rodic V, MCCB warm adjustment testing concept, INTERNATIONAL CONFERENCE ON INNOVATIVE IDEAS IN SCIENCE (IIS2015), Book Series: IOP Conference Series-Materials Science and Engineering, Volume: 144, Article Number: 012014, DOI: 10.1088/1757-899X/144/1/012014, Published: 2016, ISSN: 1757-8981;
2. Erdei, Z., Horgos, M., Chiver, O., ATECA PROGRAM - Analyzer of Tolerance of the Electric Analog Circuits, Proceedings of the International Scientific Conference MicroCAD '2009, Miskolc (Ungaria), Section J (Electrotehnics and Electronics), ISBN: 978-963-661-875-9, 2009;
3. Erdei Z; Horgos M; Zetea O, *Simulation of defects on contactor coil*, Book Series: IOP Conference Series-Materials Science and Engineering, DOI: 10.1088/1757-899X/200/1/012069, Conference on Innovative Ideas in Science, Baia Mare, ROMANIA, 2017;
4. Erdei Z; Horgos M; Lung C; Pop-Vadean A; Muresan R, *Frequency behavior of the residual current devices*, Book Series: IOP Conference Series-Materials Science and Engineering, DOI: 10.1088/1757-899X/163/1/012053, International Conference on Applied Sciences (ICAS), Engn Fac Hunedoara, Hunedoara, ROMANIA, 2017;
5. Erdei, Zoltan; Dicso, L.A.; Neamt, Liviu; Chiver, Olivian, *Symbolic equation for linear analog electrical circuits using Matlab*, WSEAS TRANSACTIONS on CIRCUITS and SYSTEMS Issue 7, Volume 9, pg.493, ISSN: 1109-2734;
6. Barz, Cristian; Chiver, Olivian; Erdei, Zoltan; Horgos, Mircea; Preradovic, Dragana; *Automation with MFD Titan for lighting control*, Electrical and Power Engineering (EPE), 2016 International Conference and Exposition on, pg. 466-471, October 20-22, 2016, Iasi, Romania;

B. TEZA DE DOCTORAT

1. *Contribuții privind analiza toleranțelor circuitelor electrice analogice*. Domeniul Inginerie Electrică, Universitatea Politehnica din București, 2008. Cond. Șt. Prof. dr. ing. Mihai Iordache.

C. CĂRȚI ȘI CAPITOLE ÎN CĂRȚI

1. Chiver Olivian, Petrean Liviu, Neamț Liviu, Erdei Zoltan, *Computers and Simulation in Modern Science, Volume III / Chapter 6: End Winding Inductance of Three-Phase A.C. Machines*, WSEAS Press, 978-960-474-256-1 2010;
2. Neamț Liviu, Petrean Liviu, Chiver Olivian, Erdei Zoltan, *Computers and Simulation in Modern Science, Volume IV / Chapter 20: Power Transmission Line Magnetic Fields for different Phase Arrangements*, WSEAS Press, 978-960-474-267-7, 2010;
3. Erdei Zoltan, *Măsurări electrice și electronice*, Risoprint, 978-973-53-2328-8, 2019;
4. Erdei Zoltan, *Îndrumar de laborator măsurări electrice și electronice*, Casei Corpului Didactic „Maria Montessori”, 978-606-701-324-1, 2019.

D. ARTICOLE PUBLICATE ÎN REVISTE DIN FLUXUL ȘTIINȚIFIC INTERNAȚIONAL PRINCIPAL (WOS/BDI)

D.1. ARTICOLE INDEXATE WOS

1. Chiver, Olivian; Neamt, Liviu; Matei, Oliviu; Erdei, Zoltan; Barz, Cristian; *Utilization of finite elements programs and Matlab Simulink in the study of a special electrical motor*, International Journal of Advanced Computer Science and Applications Volume: 8 Issue: 4 Pages: 317-323 (Apr.2017);
2. Olivian CHIVER, Liviu NEAMT, Cristian BARZ, Eleonora POP, Cristinel COSTEA, Zoltan ERDEI *Study on the End Winding Inductance of Three-Phase Windings in Two Layers*, Journal Tehnički vjesnik/Technical Gazette (Print: ISSN 1330-3651, Online: ISSN 1848-6339), Vol. 26/No. 5

D.2. ARTICOLE INDEXATE BDI

3. Neamt, Liviu; Chiver, Olivian; Erdei, Zoltan; Barz Cristian; *Aspects Regarding SF6 Switch Disconnecter Framework Design*, Carpathian Journal of Electrical Engineering, ISSN 1843-7583, vol.10, no.1, Baia Mare, 2016;
4. Erdei, Zoltan; Dicso, L.A.; Neamt, Liviu; Chiver, Olivian, *Symbolic equation for linear analog electrical circuits using Matlab*, WSEAS TRANSACTIONS ON CIRCUITS and SYSTEMS Issue 7, Volume 9, pg.493, ISSN: 1109-2734;
5. NEAMT Liviu, HORGOS Mircea, CHIVER Olivian, ERDEI Zoltan, *Estimation of power cables magnetic fields in mine tunnels*, Journal of Sustainable Energy, Volume II - Nr. 4, 2011;
6. Chiver O., Neamt L., Erdei Z. and Barz C., *Induction motor analysis by finite elements method*, Journal of Electrical and Electronics Engineering, vol.3, no.2, p.51-54, ISSN 1844-6035, 2010;

7. Horgoș, M., Neamț, L., Chiver, O., Erdei, Z., *Contributions to the calculation of the forces developed by the electromagnets using FEM*, Scientific Bulletin, Serie C, Vol. XXI. Fascicle: Mechanics, Tribology, Machine Manufacturing Technology, Cod CNCISIS 610, tip B+, ISSN 1224-3264, pag. 273-278, 2007;
8. Horgoș, M., Erdei, Z., Barz C., *Management of electricity to a county library*, Carpathian Journal of Electrical Engineering, vol. 8, no. 1, 2014;
9. Barz C., Latinovic, T., Erdei, Z., Domide G., Balan A., *Practical application with plc in manipulation of a robotic arm*, Carpathian Journal of Electrical Engineering, vol. 8, no. 1, 2014;
10. O Chiver, L Neamt, Z Erdei, E Pop, *Considerations regarding asynchronous motor rotor parameters determination by FEM*, Carpathian Journal of Electrical Engineering, ISSN 1843-7583, vol. 4, no. 1, 2010;
11. Z. Erdei, M. Iordache, Lucia Dumitriu, *A Tearing Approach for Symbolic Analysis Based on Large-Change Multiparameter Sensitivities*, Seminarul Național de Electrotehnică Teoretică SNET'03;
12. C Barz, CK Jalba, Z Erdei, SML Hahn, *Approaches for the planning and implementation of Industry 4.0*, Periodicals of Engineering and Natural Sciences 7 (1), pp. 375-380;
13. Z. Erdei , *Fast Monte - Carlo Tolerance Analysis*
14. M.L. Piper, Z. Erdei, *FEM Analysis of Squirrel Cage Induction Motor with Broken Bars*
15. Mihai Iordache, Lucia Dumitriu, Zoltan Erdei, *Large-Scale Circuit Analysis Using a New Reduced-Order Technique Based on State Equations*
16. Lucia Dumitriu, Mihai Iordache, Ion Matei, Zoltan Erdei, *Particularity Aspects of Symbolic Analysis of the Analog Circuits with Exces Elements*
17. Z. Erdei, *Sensitivity in Circuit Design, Embedded Systems Design and Applications*
18. M. Iordache, Lucia Dumitriu, Z. Erdei, *Tolerance analysis of analog circuits*
19. Lucia Dumitriu, M. Iordache, Z. Erdei, *Topological Techniques for Fast Symbolic Analysis of Large Analogue Integrated Circuits*
20. Liviu Emil PETREAN, Mircea HORGOS, Liviu NEAMT, Zoltan ERDEI, Florin PETRICEAN, ILIA Mirela, DALE Lucian, *Some aspects regarding harmonics distorsions propagation in power distribution system, in considerations about power factor in nonsinusoidal and unbalanced*, pp. 5
21. M. Dumitrache, Z. Erdei, D. Niculae, *Tree and Co-tree Circuits: Methods of Determination*

E. ARTICOLE PUBLICATE ÎN LUCRĂRI ALE PRINCIPALELOR CONFERINȚE INTERNAȚIONALE DE SPECIALITATE (WOS/BDI)

E.1. ARTICOLE INDEXATE WOS

22. Chiver, Olivian; Neamt, Liviu; Pop, Eleonora; Horgos, Mircea; Erdei, Zoltan; Pop, Adina -Vadean; Pop Paul Petrica; *Single-phase PM synchronous motor simulation with Matlab/Simulink*, International Conference on Applied Sciences (ICAS2016), 25-27 May

- 2016, Hunedoara, Romania (IOP Conference Series: Materials Science and Engineering, Volume 163, Issue 1), 2017;
23. Barz, Cristian; Chiver, Olivian; Erdei, Zoltan; Horgos, Mircea; Preradovic, Dragana; *Automation with MFD Titan for lighting control*, Electrical and Power Engineering (EPE), 2016 International Conference and Exposition on, pg. 466-471, October 20-22, 2016, Iasi, Romania;
 24. Neamt, Liviu; Chiver, Olivian; Erdei, Zoltan; Barz, Cristian; *Considerations about Medium Voltage SF6 Switch Disconnecter Framework Design based on 3D Electrostatic FEA*, IEEE 16th International Conference on Environment and Electrical Engineering (EEEIC), Florence, ITALY, JUN 07-10, 2016, ISBN:978-1-5090-2320-2;
 25. Horgos Mircea, Neamt Liviu, Erdei Zoltan, Chiver Olivian, Zetea Ovidiu, *Determination of system for wireless power transfer*, 9th International Symposium on Advanced Topics in Electrical Engineering (ATEE), 2015, p. 422-425, 2015;
 26. Barz Cristian, Oprea Constantin, Chiver Olivian, Erdei Zoltan, Neamt Liviu, Horgos Mircea, Pop Vadean Adina, *The advantages of numerical analysis for claw pole alternator*, Proceedings of the International Conference and Exposition on Electrical and Power Engineering, 16-18 October 2014, Iasi, Romania, ISBN 978-1-4799-5848-1;
 27. Neamt Liviu, Chiver Olivian, Barz Cristian, Costea Cristinel, Erdei Zoltan, *Considerations about power system grounding for different soil structure*, Proceedings of the International Conference and Exposition on Electrical and Power Engineering, 16-18 October, Iasi, Romania, ISBN 978-1-4799-5848-1, 2014;
 28. Chiver Olivian, Neamt Liviu, Horgos Mircea, Erdei Zoltan, *Study of salient poles synchronous generator by finite elements analysis*, 12th International Conference on Environment and Electrical Engineering - Wroclaw, Poland, May 2013, ISBN 978-1-4673-3060-2 (IEEE), 2013;
 29. Barz Cristian, Oprea Constantin, Erdei Zoltan, Adina P.V., Florica P., *The control of an industrial process with PLC*, 2014 International Conference on Applied and Theoretical Electricity, ICATE 2014 - pp. 1-4, Craiova, ICATE, ISBN:978-1-4799-4161-2, DOI 10.1109/ICATE.2014.6972663, 2014;
 30. Erdei Z; Horgos M; Grib A; Preradovic DM; Rodic V, *MCCB warm adjustment testing concept*, INTERNATIONAL CONFERENCE ON INNOVATIVE IDEAS IN SCIENCE (IIS2015), Book Series: IOP Conference Series-Materials Science and Engineering, Volume: 144, Article Number: 012014, DOI: 10.1088/1757-899X/144/1/012014, Published: 2016, ISSN: 1757-8981;
 31. Erdei Z; Horgos M; Lung C; Pop-Vadean A; Muresan R, *Frequency behavior of the residual current devices*, Book Series: IOP Conference Series-Materials Science and Engineering, DOI: 10.1088/1757-899X/163/1/012053, International Conference on Applied Sciences (ICAS), Engn Fac Hunedoara, Hunedoara, ROMANIA, 2017;
 32. Erdei Z; Horgos M; Zetea O, *Simulation of defects on contactor coil*, Book Series: IOP Conference Series-Materials Science and Engineering, DOI: 10.1088/1757-899X/200/1/012069, Conference on Innovative Ideas in Science, Baia Mare, ROMANIA, 2017.

E.2. ARTICOLE INDEXATE BDI

33. Chiver O., Petrean L.E., Neamt L., Erdei Z. *Study Regarding End Windings Inductance of Three Phase A.C. Windings in a Single Layer*, Proceedings of the 10th WSEAS International Conference on Energy and Environment Technologies and Equipment (EEETE 10), p. 22-26, ISSN 1790-5095 ISBN: 978-960-474-181-6, 2010;
34. Chiver O., Neamt L., Erdei Z. and Pop Eleonora, *Considerations regarding asynchronous motor rotor parameters determination by FEM*, Proceedings of International Symposium on Embedded Systems Design and Applications, ESDA , Baia Mare, Romania, 2010;
35. Erdei Zoltan, Borlan Paul, Chiver Olivian, *Comparison between basic analog and digital filters*, Symposium on Embedded Systems Design and Applications, ESDA , Baia Mare, Romania, 2010;
36. Erdei Z., Dicso Luiza Alexandra, Neamt L., Chiver O., *Symbolic equation using modified nodal analysis for linear electrical circuit using Matlab*, Proceedings of the 4th EUROPEAN COMPUTING CONFERENCE, pg. 73 ISSN: 1790-5117, ISBN: 978-960-474-178-6, 2010;
37. Neamt L., Petrean L. E., Chiver O., Erdei Z., *The Influence of Phase Transposing on Double Circuit Overhead Power Line Magnetic Field*, Proceedings of the 10th WSEAS International Conference on Energy and Environment Technologies and Equipment (EEETE 10) , Bucharest, Romania, p. 35-39, ISSN 1790-5095 ISBN: 978-960-474-181-6;
38. Erdei, Z., Horgos, M., Chiver, O., *ATECA PROGRAM - Analyzer of Tolerance of the Electric Analog Circuits*, Proceedings of the International Scientific Conference MicroCAD '2009, Miskolc (Ungaria), Section J (Electrotehnics and Electronics), ISBN: 978-963-661-875-9, 2009;
39. Mircea Horgos, Zoltan Erdei, Cristian Barz, *The Management of Energy Consumption from an Economic Objective*, The International Conference of the Carpathian Euro-Region Specialists in Industrial Systems, CEurSIS 2014, 10th Edition, Baia Mare, Romania, pp. 190-195-2014;
40. Mircea Horgos, Zoltan Erdei, Roxana Muresan, *Stability Analysis of Differential Relays in Operation at Different Values of Frequency*, The International Conference of the Carpathian Euro-Region Specialists in Industrial Systems, CEurSIS 2014, 10th Edition, Baia Mare, Romania, pp. 184-189-2014;
41. Mircea Horgos, Liviu Petrean, Zoltan Erdei, D. Nicolae, *Analiza golurilor de tensiune din rețeaua de alimentare cu energie electrică*, volumul conferinței SNET'08, 5-7 iunie 2008, Universitatea Politehnică din București, ISBN 978-606-521-045-5., 2008;
42. Horgoș M., Petrean L. E., Neamt L., Erdei Z. , *About the quality of power supply electricity to an industrial consumer*, microCAD 2009, International Scientific Conference, march, 19-20, Miskolc, pp. 33-38, 2009;

43. Z. Erdei, M. Horgos, L. Petrean, *Analysis and monitoring a connection to the electrical network for a industrial consumer*, in 5 th International Conference on Electrical and Power Engineering, EPE 2008, Iasi, Romania, pp. 161-166-2008;
44. Horgos, M., Neamt, L., Erdei, Z., Barz, C., Zetea, O., *Determination of system for wireless power transfer*, ISBN: 978-147997514-3, 2015 9th International Symposium on Advanced Topics in Electrical Engineering;
45. Z. Erdei, M. Horgos, *The comparison between ORCAD and MATLAB on tolerance analysis for analog circuit*, International Multidisciplinary Conference 7th Edition, Baia Mare, Romania, pp. 229-236-2007;
46. Horgos Mircea, Erdei Zoltan, Barz Cristian, Birsan Ionut, Ilia Mirela, *Contributions to Testing Residual Current Devices at Different Frequency Values*, 6Th International Conference on Modern Power Systems, MPS 2015, Acta Electrotehnica, volumul 6, nr.3;
47. Mircea Horgos, Zoltan Erdei, Cristian Barz, *The Management of Energy Consumption from an Economic Objective*, in The International Conference of the Carpathian Euro-Region Specialists in Industrial Systems, CEurSIS 2014, 10th Edition, Baia Mare, Romania, pp. 190-195-2014.

F. ALTE LUCRĂRI ȘI CONTRIBUȚII ȘTIINȚIFICE

F.1. CONTRACTE DE CERCETARE. Director /Responsabil proiect partener:

1. Ministerul Educației și Cercetării – CNCSIS - Tema nr. 73. Cod CNCSIS: 144, Tehnici de înaltă performanță folosite în proiectarea asistată de calculator a circuitelor analogice, 2002-2003
2. P-CD - Dezvoltarea parteneriatelor la nivel national si international, in domeniul Sisteme Dedicat, in vederea organizarii de manifestari stiintifice si pregatirea de proiecte comune in programul cadru 7 UE, 2007-2008
3. UTCN - Scoala universitara de formare initiala si continua a personalului didactic si trainerilor din domeniul specializarilor tehnice si ingineresti, DidaTec, POSDRU/87/1.3/S/60891, 2013
4. Dispozitiv de reanclansare a intreruptoarelor de joasa tensiune, Eaton Electro Productie , 3000 euro
5. Dispozitiv de blocare a a intreruptoarelor de joasa tensiune, Eaton Electro Productie, 2000 euro
6. Studiul si elaborarea automatizarii statiei de epurare a apelor uzate de pe linia de vopsitorie electrostatica, Eaton Electro Productie, 2000 euro

F.3. MEMBRU ÎN COMITETE ȘTIINȚIFICE ȘI RECENZOR

1. **WOS:** *International Conference on Innovative Ideas in Science (IIS)*, membru colectiv, 2015 - 2018;
<http://conf.cunbm.utcluj.ro/index.php/iis/iis2015>
2. Revistă din România **BDI:** *Carpathian Journal of Electronic and Computer Engineering*, ISSN 1844 – 9689, recenzor, 2013- 2018;

<http://ciece.ubm.ro/index.php>

Data

14.06.2019

Semnatura