

## LISTA DE LUCRĂRI – *SL. dr. ing. Dragoș NICULAE*

### A – teza de doctorat

**A1.** "Contribuții la diagnosticarea circuitelor electrice", conducător științific prof.dr.ing. Mihai IORDACHE, U.P.B. București, 2006.

### B – Carti si capitole in carti

**Ba 1.** Mihai IORDACHE, Lucian MANDACHE, **Dragos NICULAE** – „Analiza asistata de calculator a senzitivitatilor si tolerantelor circuitelor analogice”. Editura MATRIX ROM – 2010, ISBN 978-973-755-583-0.

**Ba 2.** Mihai IORDACHE, Lucia DUMITRIU, Dragos NICULAE, Georgiana ZAINEA chap. „Power transfer by magnetic induction studied by coupled mode theory” from book „Wireless power transfer”, editor Johnson Agbinya, River Publishers Series in Communications, Aalborg, Denmark, 2012, ISBN 978-87-92329-23-3.

**Bb 1.** **Dragos NICULAE**, Catalina POPESCU, Andrei ILIE, D. DONCESCU, Olivian STANICA – „Teoria circuitelor electrice. Culegere de probleme”. Editura MATRIX ROM – 2007, ISBN 978-973-755-201-3.

### C – Lucrari indexate ISI/BDI

**C 1.** Gabriela Ciuprina, Daniel Ioan, **Dragos Niculae**, Jorge Fernandez Villena, L. Miguel Silveira, „Parametric models based on sensitivity analysis for passive components”. In the monograph "Intelligent Computer Techniques in Applied Electromangetics" in the Book Series "Studies in Computational Intelligence", vol. 119, pp.231-239, Springer, 2008 (cotata ISI - WOS:000261540000028).

**C 2.** Mihai, Iordache, Lucia Dumitriu, **Dragos, Niculae**, “A new generalised hybrid method for nonlinear analog circuit analysis”, Rev. Roum. Sci. Techn.- Électrotechn. et Énerg., Tome 53, No. 4, Bucarest , 2008, pp. 393-401, ISSN 0035-4066 (cotata ISI - WOS:000262136600004).

**C 3.** A. Marascu, Lucia Dumitriu, M. Iordache, **D. Niculae**, “Tolerance Analysis for Chebyshev Filteres”, Proceedings of 4<sup>th</sup> IEEE European Conference on Circuits and Systems for Communications, ECCSC’08, July 10-11, 2008, Politehnica University, Bucharest, România, pp. 78-62, ISBN: 978 – 606 - 521 – 043 – 1 (cotata ISI - WOS:000259024700019).

**C4.** M. Iordache, Ileana Calomfirescu, **D. Niculae**, M. Dogaru, „Simulation of Induction Motor Using State Equations”, Proceeding of the 7<sup>th</sup> International Symposium Advanced Topics in Electrical Engineering – ATEE’11, 12-14 May 2011 – Bucharest,

ROMANIA,Editura Politehnica Press, pp. 59 - 64, ISSN: 2068-7966 (cotata ISI - WOS:000310701200035).

**C5. D. Niculae**, M. Iordache, Lucia Dumitriu, „Magnetic Coupling Analysis in Wireless Transfer Energy”, Proceeding of the 7<sup>th</sup> International Symposium Advanced Topics in Electrical Engineering – ATEE’11, 12-14 May 2011 – Bucharest, ROMANIA,Editura Politehnica Press, pp. 405 - 408, ISSN: 2068-7966(cotata ISI - WOS:000310701200004).

**C6. Dragoș NICULAE** - Fault diagnosis in analog circuits based on parametric deviation of components computation – UPB, Sci.Bul. Vol. 70, 2008, nr.2, ISSN 1454-234x, România (BDI - Scopus).

**C7.** N. Voicu, Lucia Dumitriu, M. Iordache, **D. Niculae** “Modeling of the Induction Motor Ventilation by Electric Circuits”, U.P.B. Sci. Bull. Series C, Vol. 71, Iss 4, 2009, pp. 175-182, ISSN 1454-234x (BDI – Scopus).

**C8.** Lucia Dumitriu, **Dragos Niculae**, M. Iordache, L. Mandache, Georgiana Zainea, „On wireless power transfer”, 11-th International Conference on Applied and Theoretical Electricity ICATE 2012, Craiova 25-27 october, 2012 (BDI – Scopus , **DOI:** 10.1109/ICATE.2012.6403386).

**C9.** M. Iordache, Lucia Dumitriu, L. Mandache, **Dragos Niculae** „On analog circuit parameter estimation”, 11-th International Conference on Applied and Theoretical Electricity ICATE 2012, Craiova 25-27 october, 2012 (BDI – Scopus, **DOI:** 10.1109/ICATE.2012.6403381)

## **D – Lucrari publicate in reviste si volume de conferinte cu referenti (neindexate)**

**D 1.** Mihai Iordache, Lucia Dumitriu, Catalin Dumitriu, Nicolae Voicu, **Dragos Niculae**, “Hybrid symbolic method for steady-state thermal field analysis”, Conference, Excellence Research – A Way to E.R.A, October 24-26, Brasov, Romania, 2007, Editura Tehnică, ISSN: 1843 – 5904.

**D 2.** Mihai Iordache, Lucia Dumitriu, Elena Rotar, Gabriela Nicolescu, Aurora Joga, Nicolae Voicu, Catalin Dumitriu, **Dragos Niculae**, “A new electro insulating varnish in H class used to improve the electrical motor performances”, Conference, Excellence Research – A Way to Innovation, July 27-29, Brasov, Romania, 2008, Editura Tehnică, ISSN: 1844 – 7090, pp. 258-1 – 258-6.

**D 3.** Mihai Iordache, Lucia Dumitriu, **Dragos Niculae**, “A New Reduced-Order Technique Based on State Equations”, ACTA Electrotehnica Proceedings of the 2<sup>nd</sup> International Conference on Modern Power Systems, MPS 2008, Mediamira Science Publisher, ISSN: 1841 – 3323, pp. 444 – 449.

**D 4. Dragoș NICULAE** - Fault diagnosis in analog circuits based on parametric deviation of components computation – UPB, Sci.Bul. Vol. 70, 2008, nr.2, ISSN 1454-234x, România (BDI – Scopus, Inspec, Ulrichs).

**D 5.** Mihai Iordache, Mihai Dogaru, **Dragoș NICULAE**, "Modelarea regimurilor dinamice ale mașinii sincrone", Rev. Electrotehnica, Electronica, Automatica, 57 Nr.4, București, 2009, pp.42-46, ISSN 1582-5175 (BDI – Copernicus, Ulrichs).

**D 6. Dragoș NICULAE**, Dan FLORICĂU - Fault detection in asynchronous drive — Adanced Topics in Electrical Engineering (ATEE'02), Politehnica University of Bucharest, 29<sup>th</sup> November 2002, ISBN: 973-652-674-7;

**D 7.** Mihail DUMITRACHE, **Dragoș NICULAE** - Fundamental principles about the topology of the circuits — Adanced Topics in Electrical Engineering (ATEE'02), Politehnica University of Bucharest, 29<sup>th</sup> November 2002, ISBN: 973-652-674-7;

**D 8.** Daniel IOAN, Gabriela CIUPRINA, **Dragoș NICULAE**, Diana MIHALACHE - On-chip Interconnect Lines Simulation using Finite Integration Technique adapted to Transversal Magnetic Field – The 6<sup>th</sup> International Conference on SCEE 2006, Ed. Printech, ISBN(10) 973-718-520-x, ISBN(13) 978-973-718-520-4, pp.102-103, Romania;

**D 9. Dragoș Niculae**, Lucia Dumitriu, Mihai Iordache, “Fault detection and location in analog resistive circuits”, Proceedings of 9<sup>th</sup> International Workshop on Symbolic Methods and Applications in Circuit Design, SMACD 2006, October 12-13, 2006, Firenze, Italia, on CD, Firenze University Press, pp. 12-19, ISBN 88-8453-509-3.

**D 10.** Lucia Dumitriu, Mihai Iordache, **Dragos Niculae**, “State Variable Approach in Steady-State Analysis of Circuits Driven by Multi-Tone Signals”, Proceedings of 9<sup>th</sup> International Workshop on Symbolic Methods and Applications in Circuit Design, SMACD 2006, October 12-13, 2006, Firenze, Italia, on CD, Firenze University Press, pp. 12-19, ISBN 88-8453-509-3.

**D 11.** M., Iordache, Lucia Dumitriu, **D. Niculae**, Cătălina Popescu “Metode moderne pentru studiul regimului periodic al circuitelor integrate de radio frecventa”, TIB - 2006, 5-7 Octombrie 2006, București.

**D 12.** Erdei Zoltan, **Dragos NICULAE**, Cătălina Popescu „Influența toleranțelor elementelor de circuit asupra performanței sistemului” Proceeding of the 5<sup>th</sup> International Symposium Advanced Topics in Electrical Engineering – ATEE'06, 24-25 November 2006 – Bucharest, ROMANIA, Electrical Engineering Faculty, Politehnica University of Bucharest, pp. 249-252, ISBN (10) 973-8987-12-1; ISBN (13) 978-973-8987-12-8, Vol. 2 -2006 – ISBN (10) 973-8987-14-8; ISBN (13) 978-973-8987-14-2.;

**D 13. D. Niculae**, M. Iordache, Lucia Dumitriu, “Utilizarea funcțiilor de transfer în diagnosticarea circuitelor electrice analogice”, Proceeding of the 5<sup>th</sup> International Symposium Advanced Topics in Electrical Engineering – ATEE'06, 24-25 November 2006 – Bucharest, ROMANIA, Electrical Engineering Faculty, Politehnica University of Bucharest, pp. 249-252, ISBN (10) 973-8987-12-1; ISBN (13) 978-973-8987-12-8, Vol. 2 -2006 – ISBN (10) 973-8987-14-8; ISBN (13) 978-973-8987-14-2.

**D 14.** Mihai Iordache, Lucia Dumitriu, **Dragoș Niculae** ”A New Generalised Hybrid Method for Nonlinear Analog Circuit Analysis”, Simpozionul National de Electrotehnica Teoretica, SNET'07, 12-14 October 2007, Bucharest, UPB, on CD, pp. 34 – 44, ISBN: 973-718-096-8.

**D 15.** Mihai Iordache, Lucia Dumitriu, Catalin Dumitriu, Nicolae Voicu, **Dragos Niculae**, “Hybrid symbolic method for steady-state thermal field analysis”, Conferinta

“Cercetarea de Excelenta- premiza favorabila pentru dezvoltarea spatiului romanesc de cercetare”, October 24-26, Brasov, Romania, 2007, pp. 258\_1 – 258\_6.

**D 16.** Gabriela Ciuprina, Daniel Ioan, **Dragos NICULAE**, Jorge Fernandez Villena, L. Miguel Silveira „Parametric models based on sensitivity analysis for passive components”, ISEF 2007 - XIII International Symposium on Electromagnetic Fields in Mechatronics, Electrical and Electronic Engineering Prague, Czech Republic, September 13-15, 2007.

**D 17.** Mihai Iordache, Mihai Dogaru, **Dragos Niculae**, ”Asupra modelării regimurilor dinamice ale mașinii sincrone”, Simpozionul National de Electrotehnica Teoretica, SNET’08, 5-7 Iunie 2008, București, UPB, on CD, pp. 10 - 20, ISBN: 978-606-521-045-5.

**D 18.** Mihai Iordache, **Dragos NICULAE**, Iulia Dumitrescu, Gh. Despina „Calculul si importanta senzitivitatii in analiza si proiectarea circuitelor electrice” SNET ’08, 5-7 iunie 2008, UPB, Bucuresti, Romania, on CD, ISBN 978-606-521-045-5;

**D 19.** A. Marascu, Lucia Dumitriu, M. Iordache, **D. Niculae**, “Tolerance Analysis for Chebyshev Filteres”, Proceedings of 4<sup>th</sup> IEEE European Conference on Circuits and Systems for Communications, ECCSC’08, July 10-11, 2008, Politehnica University, Bucharest, România, pp. 78-62, ISBN: 978 – 606 - 521 – 043 – 1.

**D 20.** Mihai Iordache, Lucia Dumitriu, Elena Rotar, Gabriela Nicolescu, Aurora Joga, Nicolae Voicu, Catalin Dumitriu, **Dragos Niculae**, “A new electro insulating varnish in H class used to improve the electrical motor performances”, Conferinta “Cercetarea de Excelenta – O cale catre Inovare”, Iulie 27-29, Brasov, Romania, 2008, pp. 258\_1 – 258\_6.

**D 21.** Mihai Iordache, Lucia Dumitriu, Elena Rotar, Gabriela Nicolescu, Aurora Joga, Nicolae Voicu, **Dragos Niculae**, ”Improvement of the electrical motor performances by using an electro insulating varnish in H class and a trickle impregnation procedure”, 4<sup>th</sup> International Conference on Technical and Physical Problems of Power Engineering, TPE 2008, Sept. 4-6 2008, Pitesti Romania.

**D 22.** Mihai Iordache, Lucia Dumitriu, Neculai Galan, Mihai Predescu, Nicolae Voicu, Arif Mammadov, **Dragos Niculae**, ”Modeling the ventilation system of the electrical machines bz electric circuits”, TPE 2008, Sept. 4-6 2008, Pitesti Romania.

**D 23.** Arif Mammadov, Neculai Galan, Lucia Dumitriu, **Dragos NICULAE** s.a, „Three-phase asynchronous motor with axial flux and general mathematical model” 4th International Conference on Technical and Physical Problems of Power Engineering TPE 2008, Pitesti, Romania;

**D 24.** Andrei Marascu, Lucia Dumitriu, Mihai Iordache, **Dragos Niculae**, “Tolerance Analysis for Analog Circuits”, Proceedings of X<sup>th</sup> International Workshop on Symbolic and Numerical Methods, Modeling and Applications to Circuit Design, SM<sup>2</sup>ACD 2008, October 7-8, 2008, Institut fur Mikroelektronik – und Mechatronik – Systeme gGmbH Erfurt, Germany, pp. 165-171, ISBN 978-3-00-025761-2.

**D 25.** Mihai Iordache, Lucia Dumitriu, Elena Rotar, Gabriela Nicolescu, Aurora Joga, Nicolae Voicu, **Dragos Niculae**, “Improvement of the Electrical Machine Performances by Using an Electro Insulating Varnish in H Class”, Proceeding of the 6<sup>th</sup> International Symposium Advanced Topics in Electrical Engineering – ATEE’08, 20-21 November 2008 – Bucharest, ROMANIA, Editura Printech, pp. 67-70, ISBN 978-606-521-137-7.

**D 26. Dragos Niculae**, Lucia Dumitriu, Mihai Iordache, “Heat Transfer Computation Using Electrical Circuit Analogy”, Proceeding of the 6<sup>th</sup> International Symposium Advanced Topics in Electrical Engineering – ATEE’08, 20-21 November 2008 – Bucharest, ROMANIA, Editura Printech, pp. 126-129, ISBN 978-606-521-137-7.

**D 27. Nicolae Voicu**, Lucia Dumitriu, Mihai Iordache, **Dragos Niculae**, “Modeling of the Induction Motor Ventilation by Electric Circuits”, Proceeding of the 6<sup>th</sup> International Symposium Advanced Topics in Electrical Engineering – ATEE’08, 20-21 November 2008 – Bucharest, ROMANIA, Editura Printech, pp. 147-150, ISBN 978-606-521-137-7.

**D 28. N.Voicu**, Lucia Dumitriu, M.Iordache, **D.NICULAE** - Modeling of Induction Motor Ventilation by Electric Circuits – UPB, Sci.Bull. Series C. Vol. 71, Iss 4, 2009, pp.175/182, ISSN 1454-234x, Bucharest.

**D 29. Dragos Niculae**, Lucia Dumitriu, Mihai Iordache, “Electrical Circuit Methods for Heat Transfer Computation”, Proceedings of the 3<sup>rd</sup> International Conference on Electronics, Computers and Artificial Intelligence ECAI 2009, 3-5 July 2009, Pitesti, Romania, No. 4/2009, pp.140-144, ISSN-1843-2115.

**D 30. Mihai Iordache**, Lucia Dumitriu, **Dragos Niculae**, “Sensitivity Computation for Analog Circuits”, Proceedings of the 3<sup>rd</sup> International Conference on Electronics, Computers and Artificial Intelligence ECAI 2009, 3-5 July 2009, Pitesti, Romania, No. 2/2009 pp.110-114, ISSN-1843-2115.

**D 31. Ileana Calomfirescu**, M.Dogaru, M. Iordache, **D. Niculae**, Lucia Dumitriu, "Dynamic Behaviours of the Induction Motor", Simpozionul National de Electrotehnica, SNET 2010, 03-04 December, Bucharest, UPB, on CD, pp. 12-16, ISBN: 973-718-096-8.

**D 32. D. Niculae**, M. Iordache, "Consideratii privind transferul fara fir al energiei electromagnetice", Simpozionul National de Electrotehnica, SNET 2010, 03-04 December, Bucharest, UPB, on CD, pp. 12-16, ISBN: 973-718-096-8.

**D 33. Mihai Iordache**, Mihai Dogaru, **Dragos Niculae**, Ileana Calomfirescu, "Computer aided analysis of induction motor", Proceedings of the 10-th International Conference on Applied and Theoretical Electricity ICATE 2010, 8-9 octombrie 2010, Craiova, Romania.

**D 34. Mihai Iordache**, Mihai Dogaru, **Dragos Niculae**, Ileana Calomfirescu, "Computer Aided Analysis of Induction Motor", Annals of the University of Craiova, Electrical Engineering, No. 34, 2010, pp. 224-228, ISSN 1842 - 4805.

**D 35. Dragos NICULAE**, Lucia Dumitriu, Mihai Iordache, Andrei Ilie, Lucian Mandache, "Magnetic Resonant Couplings Used in Wireless Power Transfer to Charge the Electric Vehicle Batteries" – Buletinul AGIR, No. 4, 2011, pp. 155-158, ISSN 1224-7928 (BDI - Copernicus).

**D 36. M. Iordache**, M. Dogaru, D. Cazacu, **Dragos NICULAE**, “Dynamic simulation of the synchronous machines”, Scientific Bulletin of the Electrical Engineering Faculty, Year 11, no. 1 (15), ISSN 1843-6188, pp. 25-30, Targoviste, 2011 (BDI - Copernicus).

**D 37. D. Niculae**, Lucia Dumitriu, M. Iordache, L. Mandache, Georgiana Zaina, "Wireless Power Optimal Transfer in Magnetic Coupled Resonators", Proceeding of the 9-th edition of International Symposium of Electrical Engineering – ISEE 2011, Targoviste, on CD, ISBN: 978-973-712-654-2.

## **E – Brevete**

## **F – Contracte**

**F1.** Membru in echipa de cercetare in cadrul proiectului “Creșterea coeficientului de utilizare a echipamentelor electrotehnice prin utilizarea de noi materiale electroizolante în clasa de izolație H”. Program CEEEX, Modul I, contract nr. 258-11.09.2006. Beneficiar. AMCSIT – director de proiect - prof.dr.ing. Mihai Iordache.

**F2.** Membru in echipa de cercetare in cadrul proiectului “*Comprehensive and Highly Accurate Models for EM Effects of Nano-blocks RFICs* ([www.chameleon-rf.org](http://www.chameleon-rf.org))” FP6/STREP/Chameleon 2007– director de proiect – prof.dr.ing. Daniel Ioan.

27.02.2013