

L I S T A
lucrărilor științifice
(selecție)

A. Teza de doctorat

Titlul tezei de doctorat: *Metode eficiente de analiză a circuitelor de radiofrecvență* (251 p.)
Domeniul: *Inginerie electrică*
Conducător științific: prof. univ. dr. ing. Gheorghe GAVRILĂ

B. Cărți și capitole în cărți

1. V. Ioniță, O. Drosu, **F. Enache**, *Electrotehnica – Îndrumar de laborator*, Editura Printech, București, 2001, 186p, ISBN 973-652-373-X
2. V. Ioniță, O. Drosu, **F. Enache**, *Electrotehnica – Caiet de laborator*, Editura Printech, București, 2001, 102p, ISBN 973-652-409-4
1. E. Cazacu (coordonator), I. Nemoianu, M. Maricaru, **F. Enache**, M. Stănculescu, A. Stănculescu, A. Anghel, *Chestiuni speciale de teoria circuitelor electrice – Elemente de teorie și aplicații. vol. 2*, Editura Matrix-Rom, București, 2005, 142p, ISBN 973-685-926-6
2. **F.R. Enache**, *Metode de analiză a circuitelor de radiofrecvență*, Editura Academiei Tehnice Militare, 2014, 238p, ISBN 978-973-640-232-6

C. Lucrări indexate ISI/BDI

1. G. Gavrilă, **F. Enache**, *Relativ la calculul parametrilor care intervin în schema echivalentă a unui transformator solicitat la impuls atmosferic*, A XIX-a Sesiune de Comunicări Științifice cu participare internațională „NAV-MAR-EDU 2005” 02-04 iunie 2005, Constanța (apărută pe CD ISBN 973-8303-54-0).
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2. **F. Enache**, G. Gavrilă, *Metode eficiente de analiză a circuitelor integrate de radiofrecvență*, A XIX-a Sesiune de Comunicări Științifice cu participare internațională „NAV-MAR-EDU 2005” 02-04 iunie 2005, Constanța (apărută pe CD ISBN 973-8303-54-0)
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4. G. Gavrilă, **F. Enache**, *Computation of the Electrostatic Fields in the Case of the True Electric Charges*, 5th International Conference on Electromechanical and Power Systems (SIELMEN - 2005), October 6-8, 2005, Chișinău (in Proceedings, vol. 2, p.1004-1007, ISBN general 973-716-208-0, ISBN vol. 2: 973-716-230-7 and on CD ISBN 973-716-208-0)
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5. G. Gavrilă, **F. Enache**, *Computation of the Electrostatic Fields and Potentials by means of the Symbolic Methods*, 6th International Symposium on Electrical Engineering ISEE 2005, October 17-19, 2005, Târgoviște (on CD ISBN 973-712-101-5 and internet <http://isee.valahia.ro>)
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6. E. Cazacu, A. Moraru, **F. Enache**, *Diamagnetic Levitation Solution for a Cylindrical Symmetric Ring magnet*, Revue Roumaine de Sciences Techniques (série Électrotechnique et Énergetique), 2006, tome 51, no. 1, p. 37-44, ISSN 0035-4066
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7. G. Gavrilă, **F. Enache**, *Symbolic methods for the pace voltages calculation in the case of earth electrodes of different shapes*, Buletinul I.P.Iași, Tomul LII(LVI), Fasc. 5C, 2006, p.1507-1512, ISSN 1223-8139
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8. G. Gavrilă, **F. Enache**, *The pace voltages calculation in the case of earth electrodes of different shapes by means of symbolic methods*, The 6th International Conference “Communications – 2006”, June 08-10, 2006, Bucharest, p.299-302 (in Proceedings, ISBN 973-718-479-3, 978-973-718-479-5)
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9. G. Gavrilă, **F. Enache**, *Symbolic methods for the pace voltages calculation in the case of earth electrodes of different shapes*, 4-th International Conference on Electrical and Power Engineering EPE 2006, Section “Electrical Energy Utilization”, October 12-14, 2006, Iași (on CD ISSN 1223-8193)
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10. G. Gavrilă, **F. Enache**, E. Cazacu, *Steady State Magnetic Field Computation using the Symbolic Methods*, Analele Universității din Craiova, seria Inginerie electrică, anul 31, nr.31, 2007, p.195-200, ISSN 1842-4805
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11. **F. Enache**, G. Gavrilă, E. Cazacu, *Study of the Uniform Magnetic Field Domains (3D) in the Case of the Helmholtz Coils*, Analele Universității din Craiova, seria Inginerie electrică, anul 31, nr.31, 2007, p.201-206, ISSN 1842-4805
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12. **F. Enache**, G. Gavrilă, *The Periodic Steady State Fast Computation of Nonlinear Dynamic Circuits in the Time Domain and Frequency Domain*. Journal MTA Review, Vol. XVII, No.2, December 2007, p. 67-78, ISSN 1843-3391
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13. **F. Enache**, G. Gavrilă, E. Cazacu, *Study of the Uniform Magnetic Field Domains (3D) in the Case of the Helmholtz Coils*, 6-th International Conference on Electromechanical and Power Systems SIELMEN 2007, Section “Electromagnetic Field and Electrical Circuits”, October 4-6, 2007, Chișinău, p.201-206 (on CD ISSN 1842-4805)
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14. G. Gavrilă, **F. Enache**, E. Cazacu, *Steady State Magnetic Field Computation using the Symbolic Methods*, 6-th International Conference on Electromechanical and Power Systems SIELMEN 2007, Section “Electromagnetic Field and Electrical Circuits”, October 4-6, 2007, Chișinău, p.195-200 (on CD ISSN 1842-4805)
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15. G. Gavrilă, **F. Enache**, *Applications of the Symbolic Methods to the Earth Electrodes Calculation*, A XX-a Sesiune de Comunicări Științifice cu participare internațională „NAV-MAR-EDU 2007” 15-17 noiembrie 2007, Constanța (apărută pe CD ISBN 978-973-8303-84-3, p.103-110).
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17. G. Gavrilă, **F. Enache**, *Steady State Magnetic Field Computation by means of Symbolic Methods*, Journal MTA Review, Vol.XVIII, No. 3, September 2008, p. 223-234, ISSN 1843-3391
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18. F. Popescu, **F. Enache**, *Training of RBF Neural Networks: A Comparative Overview*, “Mircea cel Batran” Naval Academy Scientific Bulletin, Volume XVI – 2013 – Issue 1, Published by “Mircea cel Batran” Naval Academy Press, Constanta, Romania, p.136-141, ISSN 1454-864X
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19. F. Popescu, **F. Enache**, *Microcontroller Based Audio Signal Generator*, “Mircea cel Batran” Naval Academy Scientific Bulletin, Volume XVI – 2013 – Issue 2, Published by “Mircea cel Batran” Naval Academy Press, Constanta, Romania, p. 149-151 (ISSN 1454-864X)
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21. **F. Enache**, G. Gavrilă, *Self and Mutual Inductivities Computation Using Symbolic Methods*, Journal MTA Review, Vol.XXIII, No. 4, December 2013, p. 241-250, ISSN 1843-3391
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22. F. Popescu, D. Depărățeanu, G. Paraschiv, **F. Enache**, C.O. Ilie, *Moving Objects Tracking based on Smartphone*, Journal MTA Review, Vol. XXIV, No.1, March 2014, p.43-48, ISSN 1843-3391
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23. **F.R. Enache**, I.C. Vizitiu, I. Rincu, F. Popescu, *Analysis of Direct Current Nonlinear Electrical Circuits by Means of Symbolic Computation and Genetic Algorithms*, 14th IEEE International Conference on Optimization of Electrical and Electronical Equipment (OPTIM 2014), May 22-24, Braşov, România, 2014, p. 175-178, ISBN: 978-1-4799-5183-3
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24. I.C. Vizitiu, **F. Enache**, F. Popescu, *Sidelobe Reduction in Pulse-Compression Radar Using the Stationary Phase Technique: An Extended Comparative*, 14th IEEE International Conference on Optimization of Electrical and Electronical Equipment (OPTIM 2014), May 22-24, Braşov, România, 2014 p. 898-901, ISBN: 978-1-4799-5183-3
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25. F. Popescu, **F. Enache**, I.C. Vizitiu, P. Ciotirnae, *Recurrence Plot Analysis for Characterization of Appliance Load Signature*, Proceedings of the 2014 10th IEEE International Conference on Communications (COMM 2014), Bucharest, Romania, 29-31 May, 2014, ISBN 978-1-4799-2385-4
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26. A. Enache, T. Petrescu, **F.R. Enache**, F.G. Popescu, *Spectrum Computation for Periodic Analog Signals Using Genetic Algorithms*, ICATE 2014 - International Conference on Applied and Theoretical Electricity, Craiova, Romania, 23-25 October, 2014, ISBN 978-1-4799-4161-2
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27. P. Ciotirnae, F.G. Popescu, **F.R. Enache**, M.G. Burgos, *Extended Partially Overlapped Channel Interference Model and Study for 802.11 Wi-Fi Communications*, ICATE 2014 -

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29. **Florin Enache**, Daniel Deperateanu, Teofil Oroian, Florin Popescu, Iulian Vizitiu , *Theoretical and Practical Implementation of Scrambling Algorithms for Speech Signals*, ECAI 2015 - International Conference – 7th Edition Electronics, Computers and Artificial Intelligence, 25 June -27 June, 2015, Bucharest, Romania

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30. Iulian Vizitiu, **Florin Enache**, Daniel Deperateanu, Teofil Oroian, Aurelian Nicula, *An Improved Neural Approach of Sammon Projection Algorithm*, ECAI 2015 - International Conference – 7th Edition Electronics, Computers and Artificial Intelligence, 25 June -27 June, 2015, Bucharest, Romania (BDI)

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31. **Enache F.**, Popescu F., Depărățeanu D., Enache A., Oroian T., *Multi-Criteria Optimization of Non-Uniform Linear Antenna Array using Genetic Algorithms*, 2016 11th International Conference on Communications (COMM), Bucharest, Romania, June 9-11, 2016

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32. Depărățeanu D., Oroian T., **Enache F.**, *Side Lobes Level Reduction in Planar Array Antenna Using Two-Dimensional Window Functions*, 2016 11th International Conference on Communications (COMM), Bucharest, Romania, June 9-11, 2016

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33. **Enache F.**, Depărățeanu D., Enache A., Popescu F., *Sparse Array Antenna Design Based on Dolph-Chebyshev and Genetic Algorithms*, ECAI 2016 - International Conference – 8th Edition Electronics, Computers and Artificial Intelligence, 30 June -02 July, 2016, Ploiesti, Romania

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35. Roșu G., Baltag O., **Enache F.**, Morega M., *Environmental magnetic field assessment. A case study*, 2016 International Conference on Applied and Theoretical Electricity (ICATE 2016), Craiova, Romania, October 6-8, 2016

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36. Enache A., Rusu I., Drăghici F., Brezeanu Gh., Pristavu Gh., **Enache F.**, *Smart Sensor for Chemical Compounds Concentration*, CAS 2016: International Semiconductor Conference, 10-12 October 2016, Sinaia, Romania

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

- Reviste

1. G. Gavrilă, **F. Enache**, *Fenomene electromagnetice tranzitorii în transformatoarele de distribuție*, Revista Producerea, transportul și distribuția energiei electrice și termice, 2005, nr.11-12, p. 11-19 (ISSN 1224-1113)

2. G. Gavrilă, **F. Enache**, *Utilizarea metodelor simbolice pentru calculul tensiunii de pas în cazul prizelor de pământ de diferite forme*, Revista Producerea, transportul și distribuția energiei electrice și termice, 2006, nr.4 (aprilie), p. 15-28 (ISSN 1224-1113)

- Selecție cu maximum 20 lucrări în volume de conferințe

3. G. Gavrilă, **F. Enache**, *Transmiterea supratensiunilor între înfășurările transformatoarelor de distribuție*, Conferința Internațională „Energetica Moldovei - 2005” 21-24 septembrie 2005, Chișinău (publicată în volum, p.197-205, ISBN 9975-62-145-7, 350 ex.)

4. F. Popescu, I.C.Vizitiu, C.Bălan, **F.Enache**, *Advanced radio technologies in the field of military communications*, 4th International Conference „New Challenges in the Field of Military Sciences”, Zrinyi Miklos National Defence University (ZMNDU), Budapest, Hungary, November 07-08, 2006

5. **F. Enache**, G. Gavrilă, F. Constantinescu, *Cu privire la analiza circuitelor integrate de radiofrecvență*, National Symposium Theoretical Electrical Engineering (SNET '05) May 12-14, 2005, Bucharest (apărută pe CD, p.213-218, ISBN 973-618-268-5)

6. **F. Enache**, G. Gavrilă, *O metodă electrică pentru determinarea temperaturii de tranziție vitroasă la materialele electroizolante*, National Symposium Theoretical Electrical Engineering (SNET '05) May 12-14, 2005, Bucharest (apărută pe CD, p.356-359, ISBN 973-618-268-5)

7. **F. Enache**, G. Gavrilă *Shooting Methods for the RF Nonlinear Circuits Analysis*, The 31st Internationally Attended Scientific Conference of the Military Technical Academy, November 3-4, 2005, Bucharest (apărută pe CD, ISBN 973-640-074-3, section 13 p.50-57, Electrotechnics).

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9. **F. Enache**, G. Gavrilă, E. Cazacu, *Study of the Uniform Magnetic Field Domains (3D) in the Case of the Helmholtz Coils*, Simpozionul Național de Electrotehnică Teoretică (SNET'07), 12-14 octombrie 2007, București (apărută pe CD ISBN)

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