

Lista de lucrări

Conferențiar, GHEORGHE Alexandru Gabriel

I. TEZA DE DOCTORAT (T)

T1. Teza de doctorat cu titlul “*Metode noi de analiză a circuitelor neliniare de RF*”, îndrumător prof. dr. ing. F. Constantinescu. Diploma de Doctor în domeniul Inginerie Electrică, nr. 283 din 20.04.2010 emisă de Ministerul Educației, Cercetării și Tineretului.

II. CĂRȚI PUBLICATE (C)

C1. Al. G. Gheorghe, F. Constantinescu, *New topics in simulation and modeling of RF circuits*, The River Publishers Series in Circuits and Systems, octombrie 2016, 212 pgs., ISBN: 9788793379466, eBook ISBN: 9788793379459.

C1. D. Popovici, F. Constantinescu, M. Maricar, F. I. Hantila, M. Nitescu and **Al. G. Gheorghe**, Capitol de carte: *Modeling and simulation of piezoelectric devices*, pp. 471-500, Recent Advances in Modelling and Simulation, I-Tech Education and Publishing, Viena, Austria, iunie 2008, ISBN 978-3-902613-25-7.

C1. Al. G. Gheorghe, F. Constantinescu, M. Nitescu, M. E. Marin, Capitol de carte: *Bioelectrical Impedance Circuit Models (Electrochemical Impedance Spectroscopy)*, IntechOpen, 2020, 15pgs, ISBN: 978-1-78985-216-5.

C1. Al. G. Gheorghe, M. E. Marin, Capitol de carte: *Electrical circuits as dynamical systems (Qualitative and Computational Aspects of Dynamical Systems)*, IntechOpen, 2022, 25pgs, ISBN 978-1-80356-567-5.

C1. F. Constantinescu, **Al. G. Gheorghe**, M. E. Marin and F. R. Enache, Capitol de carte: *Frequency Domain Models of Nonlinear Loads in Power Systems (Power Quality and Harmonics Management in Modern Power Systems)*, IntechOpen, Published: 26 November 2023, 38pgs, ISBN: 978-1-83769-816-5.

III. ALTE MATERIALE PUBLICATE (I,D)

I - Culegeri și Îndrumare publicate (separate în edituri cu ISBN și în tipografiile locale/de instituții sau de uz intern).

I1. F. Constantinescu, **Al. G. Gheorghe**, M. Nitescu, C. V. Marin, A. Ionescu, *Simularea circuitelor electrice - lucrari de laborator*, Editura Printech, 2011, ISBN 978-606-521-716-4, 221 pg.

I2. **Al. G. Gheorghe**, *Culegere de probleme de teoria circuitelor*, Editura POLITEHNICA PRESS, 2014, ISBN 978-606-515-547-3, 177 pg.

D - Alte lucrări publicate: capitole publicate în volume colective, capitole teoretice redactate, sisteme de laborator funcționale etc.

- D1.** F. Constantinescu, **Al. G. Gheorghe**, *Suport si Note de Curs pentru Teoria Circuitelor Electrice*, seria A - Facultatea de Inginerie Electrica:
<https://curs.upb.ro/2024/course/view.php?id=1967>
- D2.** **Al. G. Gheorghe**, *Suport si Note de Curs pentru Simularea Circuitelor Electrice*, seria B - Facultatea de Inginerie Electrica:
<https://curs.upb.ro/2024/course/view.php?id=1974>
- D3.** **Al. G. Gheorghe**, *Suport si Note de Curs pentru Elemente de Inginerie Electrica*, seria IPA - Facultatea de Ingineria Sistemelor Biotehnice & Facultatea de Inginerie Chimică și Biotehnologii:
<https://curs.upb.ro/2024/course/view.php?id=1431>
- D4.** **Al. G. Gheorghe**, *Suport si Note de Curs pentru Mașini Electrice*, seria MSB - Facultatea de Ingineria Sistemelor Biotehnice:
<https://curs.upb.ro/2024/course/view.php?id=1402>

IV. ARTICOLE / STUDII IN EXTENSO PUBLICATE (R,V)

Ris - Reviste de specialitate de circulație internațională recunoscute (cotate / indexate ISI Thomson Reuters, sau indexate in alte Baze de Date Internationale - BDI specifice domeniului, care fac un proces de selectie a revistelor pe baza unor criterii de performanta).

- Ris1.** F. Constantinescu, **Al. G. Gheorghe**, M. Nitescu, *New circuit models of power BAW resonators*, Revue Roumaine des Sciences Techniques-Serie Electrotechnique et Energetique, ISSN: 0035-4066, Vol. 53, Nr. 1, 2008, pp. 67-73, WOS: 000255784200008.
- Ris2.** F. I. Hantila, F. Constantinescu, **Al. G. Gheorghe**, et al., *A New Algorithm For Frequency Domain Analysis Of Nonlinear Circuits*, Revue Roumaine des Sciences Techniques-Serie Electrotechnique et Energetique, ISSN: 0035-4066, Vol. 54, Nr. 1, 2009, pp. 57-66, WOS: 000264503000006.
- Ris3.** F. Constantinescu, **Al. G. Gheorghe**, M. Nitescu, *The energy balance error for circuit transient analysis*, Revue Roumaine des Sciences Techniques-Serie Electrotechnique et Energetique, ISSN: 0035-4066, Nr.3, 2010, pp. 243-250, WOS: 000283001600005.
- Ris4.** **Al. G. Gheorghe**, F. Constantinescu, M. Nitescu, *A New Algorithm for Envelope Following Analysis*, Revue Roumaine des Sciences Techniques-Serie Electrotechnique et Energetique, Nr.2, 2011, pp 229 – 236, WOS: 000291711900012.
- Ris5.** F. Constantinescu, **Al. G. Gheorghe**, A. Florea, M. Nițescu, O. Llopis, *Artificial Transmission Line Model for Power BAW Resonators with Mechanical Nonlinearity*, Revue Roumaine des Sciences Techniques-Serie Electrotechnique et Energetique, ISSN: 0035-4066, Nr.2, 2011, pp 237 – 246, WOS: 000291711900013.
- Ris6.** **Al. G. Gheorghe**, C. V. Marin, F.Constantinescu, M. Nitescu, *Parameter Identification for a New Circuit Model Aimed to Predict Body Water Volume*, Advances in Electrical and Computer Engineering, ISSN: 1582-7445, e-ISSN: 1844-7600, DOI: 10.4316/AECE.2012.04013, Nr. 4, 2012, pp. 83 - 86, WOS: 000312128400013.
- Ris7.** **Al. G. Gheorghe**, F. Constantinescu, *An Algorithm for Finding Approximate Symbolic Pole/Zero Expressions*, Mathematics, 2025 13, no. 20: 3314.

- Ris8.** Al. G. Gheorghe, F. Constantinescu, *Solution computation for resistive circuits containing companion models*, University Politehnica of Bucharest, Scientific Bulletin Series C - Electrical Engineering, ISSN 1454-234x, Vol. 72, Nr. 4, 2010, Pages 193-204.
- Ris9.** F. Constantinescu, Al. G. Gheorghe, M. Nitescu, A. Florea, O. Llopis, P. Taras, *Parameter Identification for Nonlinear Circuit Models of Power BAW Resonator*, Advances in Electrical and Computer Engineering, ISSN: 1582-7445, e-ISSN: 1844-7600, DOI: 10.4316/aece, Nr. 1, 2011, pp. 55-62, WOS:000288761800009.
- Ris10.** F. Constantinescu, M. Nitescu, Al. G. Gheorghe, A. Florea, O. Llopis, *Behavioral circuit models of power BAW resonators and filters*, Analog Circuit Design and Signal Processing, ISSN 0925-1030, DOI: 10.1007/s10470-011-9758-7 Vol. 73, Nr 1, 2012, pp.57-64, WOS:000309130700007.
- Ris11.** F. Constantinescu, Al. G. Gheorghe, M. Nițescu, *A Capacitive Accelerometer Model*, Revue Roumaine des Sciences Techniques-Serie Electrotechnique et Energetique, ISSN: 0035-4066, Vol. 58, Nr.2, 2013, pp. 163 – 172, WOS: 000320488100006.
- Ris12.** M. E. Marin, F. Constantinescu, Al. G. Gheorghe, C. Brinzei, *An 8-Bit Current-Steering Digital to Analog Converter with Calibration Capabilities for Wireless Communications*, Revue Roumaine Des Sciences Techniques-Serie Electrotechnique Et Energetique, Vol. 62, Nr. 4, pp. 394-398, 2017, ISSN0035-4066, WOS:000439087200001.
- Ris13.** C. M. Gheorghe, I. A. Macinic, Al. G. Gheorghe, *Oblong Core Cross-Section Impact On Power Transformer Characteristics*, (2022) Revue Roumaine des Sciences Techniques Serie Electrotechnique et Energetique, 67 (3), pp. 281 - 286, WOS: 000870731700010.

Vis - Volumele unor manifestări științifice internaționale recunoscute, organizate în țară și străinătate, indexate ISI Thomson Reuters sau indexate în alte Baze de Date Internaționale - BDI specifice domeniului, care fac un proces de selecție a publicațiilor pe baza unor criterii de performanță.

- Vis1.** F. Constantinescu, Al. G. Gheorghe, C. D. Ioan, M. Nitescu, M. Iordache, L. Dumitriu, *A new approach to the computation of reduced order models for one-port and two-port RC circuits*, IEEE International Symposium on Circuits and Systems, 21-24 mai, 2006, Kos Isl, GREECE, ISBN: 0-7803-9389-9, DOI: 10.1109/ISCAS.2006.1693506, pp. 4002-4005, WOS: 000245413504084.
- Vis2.** Al. G. Gheorghe, F. Constantinescu, M. Nitescu, *Efficiency of the envelope following analyses*, International Symposium on Signals, Circuits and Systems, 12-13 iulie, 2007, Iasi, ROMANIA, ISBN: 1-4244-0969-1, DOI: 10.1109/ISSCS.2007.4292776, pp. 517-520, WOS: 000250471700132.
- Vis3.** F. Constantinescu, M. Nitescu, Al. G. Gheorghe, *Circuit models for power BAW resonators - Set-up and implementation*, 8th IEEE Africon Conference, 26-28 sept., 2007, Windhoek, NAMIBIA, ISBN: 978-1-4244-0987-7, DOI: 10.1109/AFRCON.2007.4401629, pp. 1262-1266, WOS: 000255394100192.
- Vis4.** M. Nitescu, F. Constantinescu, Al. G. Gheorghe, *Modeling of power BAW resonators*, 5th International Conference on Applied Electromagnetics, Wireless and Optical Communications, ELECTROSCIENCE'07, 14-16 dec., 2007, Puerto de la Cruz, SPAIN, ISBN: 978-960-6766-25-1, pp. 103-106, WOS: 000254098600021.

- Vis5. Al. G. Gheorghe**, C. V. Marin, F. Constantinescu, M. Nitescu, *A new circuit model for body cell mass prediction*, 4th European Conference on Circuits and Systems for Communications (ECCSC 08), 10-11 iulie, 2008, Politehn Univ, Bucuresti, ROMANIA, ISBN: 978-1-4244-2420-7, DOI: 10.1109/ECCSC.2008.4611674, pp. 189-192, WOS: 000259024700031.
- Vis6.** M. Nitescu, F. Constantinescu, **Al. G. Gheorghe**, *An AC linear parametric behavioral model of a nonlinear BAW resonator*, 4th European Conference on Circuits and Systems for Communications (ECCSC 08), 10-11 iulie, 2008, Politehnica University, Bucuresti, ROMANIA, ISBN: 978-1-4244-2420-7, DOI: 10.1109/ECCSC.2008.4611671, pp.176-179, WOS: 000259024700028.
- Vis7.** I. F. Hantila, F. Constantinescu, **Al. G. Gheorghe**, M. Nitescu, *A frequency domain method for analysis of dynamic circuits with resistive nonlinearities*, 4th European Conference on Circuits and Systems for Communications (ECCSC 08), 10-11 iulie, 2008, Politehn Univ, Bucuresti, ROMANIA, ISBN: 978-1-4244-2420-7, DOI: 10.1109/ECCSC.2008.4611677, pp. 201-204, WOS: 000259024700034.
- Vis8.** F. Constantinescu, M. Nitescu, **Al. G. Gheorghe**, C. V. Marin, *A method for one port and two-port RC circuit synthesis*, 7th WSEAS International Conference on Circuits, Systems, Electronics, Control & Signal Processing CSECS'08, 15-17 dec., 2008, Puerto de la Cruz, SPAIN, ISBN: 978-960-474-035-2, pp. 124-127, WOS: 000264171900020.
- Vis9.** F. Constantinescu, **Al. G. Gheorghe**, M. Nitescu, *A Time Step Choice Algorithm for Transient Analysis of Circuits*, AFRICON 2009, Nairobi, Kenya, 23-26 sept., 2009, ISBN: 978-1-4244-3919-5, DOI: 10.1109/AFRCON.2009.5308136, pp. 619-622, WOS: 000275165500110.
- Vis10.** F. Constantinescu, **Al. G. Gheorghe**, M. Nitescu, *Circuit Models of Passive One-ports with Resistive and Capacitive Behavior*, International Symposium on Electrical and Electronics Engineering, 16-18 sept., 2010, ISEEE 2010, Galați, Romania, ISBN: 978-1-4244-8406-5, DOI: 10.1109/ISEEE.2010.5628477, 4 pgs., WOS: 000304591700003.
- Vis11.** F. Constantinescu, **Al. G. Gheorghe**, M. Nitescu, A. Florea, O. Llopis, *Physical and Behavioral Circuit Models of Power BAW Resonators*, ICCSC 2011, June 30 - July 1, 2011, Iasi, Romania, 978-1-61284-944-7, DOI: 10.1109/ISSCS.2011.5978717, pp.1-4, WOS: 000337925400073.
- Vis12.** F. Constantinescu, **Al. G. Gheorghe**, M. Nitescu, A. Florea, *Nonlinear artificial line models for power BAW resonators*, AFRICON 2011, 13-15 sept., 2011, Livingstone, Zambia, ISSN: 2153-0025, ISBN: 978-1-61284-992-8, DOI: 10.1109/AFRCON.2011.6072051, 6 pgs., WOS: 000298383100095.
- Vis13.** I. G. Stroe, F. Constantinescu, **Al. G. Gheorghe**, M. Nitescu, O. Llopis, *Measurement and Modeling of Nonlinear Effects for Power BAW Filters with AlN*, ATEE 2013, 23-25 may, 2013, Bucuresti, Romania, DOI: 10.1109/ATEE.2013.6563473, pp: 1-4, Print ISBN: 978-1-4673-5979-5, INSPEC Accession Number: 13778451, WOS: 000332928500127.
- Vis14.** **Al. G. Gheorghe**, F. Constantinescu, M. Nitescu, *Improved LR Algorithm for Computation of the Approximate Symbolic Pole/Zero Expressions*, AFRICON 2013, Mauritius, 9-12 sept., 2013, DOI: 10.1109/AFRCON.2013.6757796, 4 pgs., ISSN: 2153-0025, Print ISBN: 978-1-4673-5940-5, INSPEC Accession Number: 14147294, WOS: 000352082700181.

- Vis15. Al. G. Gheorghe**, F. Constantinescu, M. E. Marin, Miruna Nitescu, *The Envelope Following Analysis of a Buck Converter with Closed Loop Control*, 4-th International Symposium on Electrical and Electronics Engineering, 11 - 13 Oct. 2013, Galati ROMANIA, DOI: 10.1109/ISEEE.2013.6674359, 5 pgs., ISBN 978-1-4799-2442-4, INSPEC Accession Number: 13936673, WOS: 000335153400053.
- Vis16.** F. Constantinescu, M. Nitescu, **Al. G. Gheorghe**, M. E. Marin, D. Rogobete, A. C. Tarnoveanu, A. M. Vizanti, *A New Approach to Intelligent Search in Electrical Engineering Literature*, 5th International Conference on Information, Intelligence, Systems and Applications July 7-9 2014, Chania, Crete, Greece, 6 pgs., WOS: 000345861900026.
- Vis17.** M. E. Marin, C. Brînzei, F. Constantinescu, **Al. G. Gheorghe**, I. Ursac, *Design of a 8 Bit Current-Steering DAC for a GSM Transmitter*, International Symposium on Fundamentals of Electrical Engineering 2014 (ISFEE 2014), University POLITEHNICA of Bucharest, Romania, November 28-29, 2014, DOI: 10.1109/ISFEE.2014.7050565, 5 pgs., WOS: 000380570500033.
- Vis18.** F Constantinescu, O. Taus, **Al. G. Gheorghe**, *A new behavioral model for frequency domain analysis of power BAW filters*, The 13th International Conference on Engineering of Modern Electric Systems 2015 (ICEMES 2015), Oradea, Romania, 11-12 June 2015, DOI: 10.1109/EMES.2015.7158392, 4 pgs., WOS: 000363815100005.
- Vis19. Al. G. Gheorghe**, F. Constantinescu, M. Nițescu, *State Matrix Simplification for Computation of the Approximate Pole/Zero Expressions*, International Conference on Synthesis, Modeling, Analysis and Simulation Methods and Applications to Circuit Design (SMACD 2015), Istanbul, Turkey, 7-9 September, 2015, 4 pgs., WOS: 000380412000008.
- Vis20.** O. S. Taus, F. Constantinescu, **Al. G. Gheorghe**, *Compensation of the Connection Wires Influence for a Behavioral Model of a Power BAW Filter*, 2015 IEEE 21st International Symposium for Design and Technology in Electronic Packaging (SIITME), October 22nd–25th, 2015, Brasov, Romania, 4 pgs., WOS: 000377765500037.
- Vis21.** M. E. Marin, F. Constantinescu, C. Brînzei, **Al. G. Gheorghe**, *Verification of a Calibration Method for Digital to Analog Converters*, International Symposium on Fundamentals of Electrical Engineering 2016 (ISFEE 2016), University POLITEHNICA of Bucharest, Romania, June 30 - July 2, 2016, 5 pgs., DOI: 10.1109/ISFEE.2016.7803193, WOS: 000392434400045.
- Vis22.** F. Constantinescu, **Al. G. Gheorghe**, M. E. Marin, O. S. Taus, *Harmonic balance analysis of home appliances power networks*, Engineering of Modern Electric Systems (EMES), 2017 14th International Conference on, Oradea, Romania, 1-2 June 2017, DOI: 10.1109/EMES.2017.7980428, Electronic ISBN: 978-1-5090-6073-3, USB ISBN: 978-1-5090-6072-6, Print on Demand(PoD) ISBN: 978-1-5090-6074-0, WOS: 000427085200061.
- Vis23.** M. E. Marin, F. Constantinescu, O. S. Taus and **Al. G. Gheorghe**, *Intermodulation products in AlN power BAW duplexer filters*, 2017 International Symposium on Signals, Circuits and Systems (ISSCS), Iasi, 2017, pp. 1-4. doi: 10.1109/ISSCS.2017.8034949, Electronic ISBN: 978-1-5386-0674-2 USB ISBN: 978-1-5386-0673-5, Print on Demand(PoD) ISBN: 978-1-5386-0675-9, WOS: 000425211500087."
- Vis24.** M. E. Marin, M. Maricar, F. Constantinescu and **Al. G. Gheorghe**, *Hardware and software approach for teaching automotive networks*, 2017 Electric Vehicles

- International Conference (EV), Bucharest, Romania, 2017, pp. 1-4. doi: 10.1109/EV.2017.8242097, WOS: 000427815000011.
- Vis25. Al. G. Gheorghe**, F. Constantinescu, M. E. Marin, V. Ștefănescu, G. Vătășelu *Frequency Domain Models for Nonlinear Home Appliance Devices*, ISFEE 2018, 1-3 Nov. 2018, Electronic ISBN: 978-1-5386-7212-9, USB ISBN: 978-1-5386-7211-2, Print on Demand(PoD) ISBN: 978-1-5386-7213-6, DOI: 10.1109/ISFEE.2018.8742469, WOS: 000480396400062.
- Vis26. Al. G. Gheorghe**, M. E. Marin, *A Two Stage Op-Amp Phase Margin Symbolic Expression*, 22nd International Conference on Circuits, Systems, Communications and Computers (CSCC 2018), Majorca, Spain, July 14-17, 2018, ISSN: 2261236X, DOI: 10.1051/mateconf/201821002040, WOS: 000567668400046.
- Vis27.** F. Constantinescu, **Al. G. Gheorghe**, M. E. Marin, G. Vătășelu, V. Ștefănescu, D. Bodescu, *New Models for Frequency Domain Simulation of Home Appliances Networks*, 2019 11th International Symposium on Advanced Topics in Electrical Engineering (ATEE), 28-30 March 2019, Electronic ISBN: 978-1-7281-0101-9, USB ISBN: 978-1-7281-0100-2, Print on Demand(PoD) ISBN: 978-1-7281-0102-6, Electronic ISSN: 2159-3604, Print on Demand(PoD) ISSN: 2068-7966, INSPEC Accession Number: 18724323, DOI: 10.1109/ATEE.2019.8724985, WOS: 000475904500140.
- Vis28.** M. E. Marin, C. S. Staicu, **Al. G. Gheorghe**, F. Constantinescu, *Generation of State Equations for Circuits with Excess Elements*, 2020 International Symposium on Fundamentals of Electrical Engineering (ISFEE), Nov 05-07, 2020, Univ Politehnica Buchares, Bucharest, ROMANIA, ISBN: 978-1-7281-9038-9, DOI: 10.1109/ISFEE51261.2020.9756144, WOS: 000812321500014.
- Vis29. Al. G. Gheorghe**, M. E. Marin, M. D. Dragusin, *New Frequency Domain Models for Multiple Port Devices with Variable Firing Angle*, 25th International Conference on Circuits, Systems, Communications and Computers (CSCC), JUL 19-22, 2021, Platania, GREECE, ISBN: 978-1-6654-2749-4, DOI: 10.1109/CSCC53858.2021.00017, WOS: 000848667100009.
- Vis30.** F. Constantinescu, **Al. G. Gheorghe** and C. G. Barancea, *Efficient Frequency Domain Models for Simulation of Circuits with Diode Rectifiers*, 2023 International Symposium on Fundamentals of Electrical Engineering (ISFEE), Bucharest, Romania, 2023, pp. 1-6, doi: 10.1109/ISFEE60884.2023.10636986, WOS: 001324614500005.
- Vis31.** M. Nitescu, F. Constantinescu, **Al. G. Gheorghe**, *Fast solving of a linear parametric A.C. model using a symbolic admittance expression*, SMACD: Proceedings of the Workshop on Symbolic Methods and Applications to Circuit Design, Firenze, Italia, 12-13 oct., 2006, ISBN: 978-888453509-2, pp. 16-20. (Scopus)
- Vis32.** F. Constantinescu, M. Nitescu, **Al. G. Gheorghe**, *New Nonlinear Circuit Models for Power BAW Resonators*, ICCSC 2008, 26-28 mai 2008, Shanghai, China, ISBN: 978-1-4244-1708-7, DOI: 10.1109/ICCSC.2008.133, Article number 4536825, pp. 599-603. (Scopus, IEEEExplore)
- Vis33.** F. Constantinescu, M. Nitescu, **Al. G. Gheorghe**, *New Circuit Models for Power BAW Resonators*, Proceedings of Xth International Workshop on Symbolic and Numerical Methods, Modeling and Applications to Circuit Design (SM2ACD 2008), Institut für Mikroelektronik- und Mechatronik-Systeme GmbH, Erfurt, Germany, 7-8 oct., 2008, pp.216-220, ISBN 978-3-00-025761-2. (Scopus)

- Vis34. Al. G. Gheorghe**, C. V. Marin, F. Constantinescu, M. Nitescu, *A new RC model for body cell mass prediction*, Proceedings of Xth International Workshop on Symbolic and Numerical Methods, Modeling and Applications to Circuit Design (SM2ACD 2008), Institut für Mikroelektronik- und Mechatronik-Systeme GmbH, Erfurt, Germany, 7-8 oct., 2008, pp.221-225, ISBN 978-3-00-025761-2. (Scopus)
- Vis35. Al. G. Gheorghe**, F. Constantinescu, M. Nitescu, *Error control in circuit transient analysis*, 2009 IEEE International Conference on Electronics Circuits and Systems, Medina Hammamet, Tunis, 13-16 dec., 2009, ISBN: 978-1-4244-5091-6, DOI: 10.1109/ICECS.2009.5410972, Article number 5410972, pp. 207-210. (Scopus, IEEEExplore)
- Vis36.** F. Constantinescu, M. Nitescu, **Al. G. Gheorghe**, *Modeling and Simulation of Power BAW Resonators and Filters*, SM2ACD 2010, 5-6 oct., 2010, Tunis-Gammarrh, Tunisia, ISBN: 978-1-4244-6816-4, DOI: 10.1109/SM2ACD.2010.5672356, 4 pgs., Article number 5672356. (Scopus, IEEEExplore)
- Vis37.** F. Constantinescu, M. Nitescu, **Al. G. Gheorghe**, *Circuit Models for Power Baw Resonators*, 2010 IEEE 26-th Convention of Electrical and Electronics Engineers in Israel, 17-20 nov, 2010, Eilat, Israel, ISBN: 978-142448680-9, DOI: 10.1109/EEEI.2010.5662086, Article number 5662086, pp. 849-853. (Scopus, IEEEExplore)
- Vis38.** G. I. Stroe, A. Florea, O. Llopis, F. Constantinescu, **Al. G. Gheorghe**, M. Nitescu, *Measurement of Nonlinear Effects for Anti-series and Anti-parallel Connections of Power Bulk Acoustic Wave Resonators*, IEEE COMCAS 2011, Tel Aviv; Israel, 7-9 nov., 2011, 4 pgs., ISBN: 978-1-4577-1692-8, DOI: 10.1109/COMCAS.2011.6105806, INSPEC Accession Number: 12442301. (Scopus, IEEEExplore)
- Vis39. Al. G. Gheorghe**, F. Constantinescu, M. Nitescu, *Transient Computation of DC-DC Converters Using a New Envelope Following Method*, SMACD 2012, Seville, Spain, 19-21 sept. 2012, DOI: 10.1109/SMACD.2012.6339381, pp. 229 - 232, ISBN: 978-1-4673-0685-0, INSPEC Accession Number: 13101516. (Scopus, IEEEExplore)
- Vis40.** F. Constantinescu, **Al. G. Gheorghe**, G. I. Stroe, M. Nitescu, O. Llopis, *A Nonlinear Circuit Model for a Three BAW Resonator Filter Working at High Power Level*, SMACD 2012, Seville, Spain, 19-21 sept. 2012, DOI: 10.1109/SMACD.2012.6339382, pp. 233 – 236, ISBN: 978-1-4673-0685-0, INSPEC Accession Number: 13101517. (Scopus, IEEEExplore)
- Vis41. Al. G. Gheorghe**, F. Constantinescu, *Pole/zero computation for linear circuits*, 6-th European Symposium on Computer Modeling and Simulation, Malta, 14-16 nov., 2012, DOI: 10.1109/EMS.2012.85, pp. 477-480, ISBN: 978-1-4673-4977-2, Article number 6410197, Pages 477-480. (Scopus, IEEEExplore)
- Vis42. Al. G. Gheorghe**, F. Constantinescu, G. I. Stroe, M. Nitescu, O. Llopis, *Behavioral models for the anti-series and anti-parallel connections of two power BAW resonators*, 6-th European Symposium on Computer Modeling and Simulation, Malta, 14-16 nov., 2012, DOI: 10.1109/EMS.2012.81, ISBN: 978-1-4673-4977-2, Article number 6410184, Pages 401-405. (Scopus, IEEEExplore)
- Vis43. Al. G. Gheorghe**, F. Constantinescu, M. E. Marin, *Symbolic Formulas for Settling Time and Phase Margin of Op-Amp with Arbitrary Number of Poles and Zeros*, 2018 IEEE 27th International Scientific Conference Electronics, ET 2018, Sozopol, Bulgaria, 13-15 sept. 2018, Electronic ISBN: 978-1-5386-6692-0, CD-ROM ISBN: 978-1-5386-

6691-3, Print on Demand(PoD) ISBN: 978-1-5386-6693-7, INSPEC Accession Number: 18302536, DOI: 10.1109/ET.2018.8549654. (Scopus)

- Vis44. Al. G. Gheorghe**, M. E. Marin and D. Bodescu, *Parameter Identification and Model Validation for a Compact Fluorescent Lamp*, 2020 24th International Conference on Circuits, Systems, Communications and Computers (CSCC), 2020, pp. 201-204, doi: 10.1109/CSCC49995.2020.00043. (Scopus, IEEEExplore)
- Vis45. Al. G. Gheorghe**, M. E. Marin and C. G. Bortosu, *Approximate Symbolic Pole/Zero Expressions of a Band-stop Filter*, 2021 XXX International Scientific Conference Electronics (ET), 2021, pp. 1-5, doi: 10.1109/ET52713.2021.9579653. (Scopus, IEEEExplore)
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Vi - Volumele unor manifestări științifice internaționale recunoscute, organizate în țară și străinătate;

- Vi1.** M. Nitescu, F. Constantinescu, **Al. G. Gheorghe**, L. Dumitriu, *Fast Solving of a Linear Parametric Model of a BAW Resonator*, Annals of the University of Craiova, Electrical Engineering series (CNCSIS B+ category journal), ISSN 1842-4805, No. 30, 2006, pp 32-35.
- Vi2.** **Al. G. Gheorghe**, M. Nitescu, F. Constantinescu, *Circuit Models for Anti-series and Anti-parallel Connections of Power Bulk Acoustic Wave Resonators*, ELECTROTEHNICA, ELECTRONICA, AUTOMATICA, ISSN 1582-5175, Vol. 57, Nr.3, 2009, pp.17-19.
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- Vi8.** **Al. G. Gheorghe**, D. Chiriac, F. Constantinescu, *A reduced order circuit model for an interdigital capacitor*, JAPMED'6, 27-29 iulie 2009, Bucuresti, Romania, ISBN 978-606-521-346-3, extended summary p. 203.

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- Vn1.** **Al. G. Gheorghe**, *Determinarea raspunsului periodical circuitelor neliniare de radiofrecventa cu SPECTRE RF*, SNET '04, Simpozionul National de Electrotehnica Teoretica, Bucuresti 22-23 oct. 2004, ISBN 973-718-096-8.
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- Vn9.** F. Constantinescu, M. Nitescu, **Al. G. Gheorghe**, *Simulation of nonlinear effects in power BAW resonators and filters*, SNET 2007 Simpozionul National de Electrotehnica

Teoretica, Bucuresti 12 - 14 oct. 2007. ISBN(10) 973-8987-12-1, ISBN(13) 978-973-8987-12-8, pp. 114-119.

- Vn10.** F. I. Hantila, F. Constantinescu, **Al. G. Gheorghe**, M. Nitescu, *Un algoritm nou pentru analiza circuitelor neliniare in domeniul frecventei*, Simpozionul Național de Electrotehnică Teoretică (SNET), 5-7 iunie 2008, București, ISBN 978-606-521-045-5.
- Vn11.** **Al. G. Gheorghe**, C. V. Marin, F. Constantinescu, M. Nitescu, *Synthesis of a new RC model for body cell mass prediction*, Simpozionul Național de Electrotehnică Teoretică (SNET), 5-7 iunie 2008, București, pp. 177-181, ISBN 978-606-521-045-5.
- Vn12.** **Al. G. Gheorghe**, M. Nitescu, F. Constantinescu, *Circuit Models for Anti-series and Anti-parallel Connections of Power BAW Resonators*, Advanced Topics in Electrical Engineering, ATEE'08, 20-21 nov., 2008, Bucuresti, Romania, 4 pgs., ISBN 978-606-521-137-7.
- Vn13.** F. Constantinescu, **Al. G. Gheorghe**, M. Nitescu, *The Energy Balance Error for Circuit Transient Analysis*, Advanced Topics in Electrical Engineering, ATEE'08, 20-21 nov., 2008, Bucuresti, Romania, ISBN 978-606-521-137-7.
- Vn14.** C.V. Marin, **Al. G. Gheorghe**, *Test Frequency Selection in Fault Dictionary Approach*, Simpozionul National de Electrotehnica Teoretica (SNET' 09), 27 nov. 2009, ISSN: 2067-4147.
- Vn15.** **Al. G. Gheorghe**, F. Constantinescu, *Rezolvarea numerica a circuitelor rezistive care contin modele companion*, Simpozionul National de Electrotehnica Teoretica (SNET' 09), 27 nov. 2009, pp. 93-98.
- Vn16.** F. Constantinescu, **Al. G. Gheorghe**, *A new envelope following algorithm*", Simpozionul Național de Electrotehnică Teoretică (SNET '10), 3-4 dec. 2010, 6 pgs., București.
- Vn17.** F. Constantinescu, **Al. G. Gheorghe**, A. Florea, M. Nitescu, *Nonlinear artificial transmission line model for power BAW resonators*, Simpozionul Național de Electrotehnică Teoretică (SNET '10), 3-4 dec. 2010, 6 pgs., București.
- Vn18.** **Al. G. Gheorghe**, F. Constantinescu, M. Nitescu, *Waveform interpolation for transient analysis*, Simpozionul Național de Electrotehnică Teoretică (SNET '10), 3-4 dec. 2010, București.
- Vn19.** F. Constantinescu, **Al. G. Gheorghe**, M. Nițescu, *Convergence problems in transient analysis of circuits containing MEMS*, Simpozionul National de Electrotehnica Teoretica (SNET' 12), 14 dec. 2012, pp.1-5, Universitatea Politehnica din București, Facultatea de Inginerie Electrică.

V. BREVETE DE INVENȚIE / INOVAȚII (B,A)

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VI. CONTRACTE ȘI RAPOARTE ȘTIINȚIFICE (P,F)

P – Proiecte de cercetare-dezvoltare – inovare obtinute prin competitie, pe bază de contract/grant, in tara/strainatate (**Pn**–naționale, **Pi**-internationale).

- Pi1. Coautor** la „*Mixed SiP and SoC Integration of Power BAW Filters for Digital Wireless Transmissions (MOBILIS)*”, 2006-2009, Proiect FP6, F. Constantinescu (directorul de proiect al partii romane), Universitatea Politehnica din Bucuresti.
- Pn1. Director de proiect** la *Metode noi de analiza a circuitelor neliniare de RF*, 2007-2008, Proiect CNCSIS tip TD, 22000 RON.
- Pn2. Director de proiect** la *Optimal design of electrical circuits using symbolic expressions of poles and zeros*, 2012-2013, Proiect CNCSIS tip PD, 296560 RON.
- Pn3. Coautor** la *Simularea eficienta a circuitelor integrate neliniare de RF –mixere si amplificatoare neliniare*, 2005-2007, proiect CNCSIS, director de proiect: F. Constantinescu, Universitatea Politehnica din Bucuresti.
- Pn4. Coautor** la *Sinteza unor modele comportamentale neliniare de circuit ale rezonatoarelor de putere cu unde acustice de volum pentru telefonie mobila*, 2006-2008, proiect CNCSIS, director de proiect: M. Nitescu, Universitatea Politehnica din Bucuresti.
- Pn5. Coautor** la *Modele neliniare de camp si de circuit pentru rezonatoarele BAW de putere*, 2009-2011, proiect CNCSIS tip IDEI, director de proiect: F. Constantinescu, Universitatea Politehnica din Bucuresti.
- Pn6. Coautor** la *Metode noi de analiza a circuitelor in domeniul timpului si in domeniul frecventei*, 2009-2011, proiect CNCSIS tip IDEI, director de proiect: F. I. Hantila, Universitatea Politehnica din Bucuresti.
- Pn7. Coautor** la *Metode noi de diagnosticare a defectelor in circuitele analogice*, 2009-2011, proiect CNCSIS tip IDEI, director de proiect: M. C. Viorel, Universitatea Politehnica din Bucuresti.

F – Alte lucrări de cercetare – dezvoltare

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