

LISTA DE LUCRĂRI

Prof.dr.ing. Gabriela CIUPRINA

I. TEZA DE DOCTORAT (T)

- T1. **Gabriela Ciuprina**, *Studiul câmpului electromagnetic în medii neliniare – contribuții privind optimizarea dispozitivelor electromagnetice*, U.P.B., 1999.
<http://www.lmn.pub.ro/~gabriela/teza/rezumat.ps.gz>
http://www.lmn.pub.ro/~gabriela/articole/GabrielaCiuprina_TezaDoctorat.pdf

II. CĂRȚI PUBLICATE (C)

- Ca – Cărți / cursuri (manuale) pentru uzul studenților, publicate în edituri recunoscute.
 Cb - Cărți de specialitate publicate în edituri recunoscute (autor, coautor, editor).
 Cc - Cărți publicate în alte edituri, cu ISBN.

Ca1. **Gabriela Ciuprina**, *Algoritmi numerici pentru calcule științifice în ingineria electrică*, Editura MatrixROM, 2013, 201 pagini, ISBN 978-606-25-0008-5. http://www.lmn.pub.ro/~gabriela/books/AlgNr_MatrixRom2013.pdf

Ca2. **Gabriela Ciuprina**, *Algoritmi numerici prin exerciții și implementări în Matlab*, Editura MatrixROM, 2013, 121 pagini, ISBN 978-606-25-0009-2.
http://www.lmn.pub.ro/~gabriela/books/AlgNrExMatlab_MatrixRom2013.pdf

Cb1. **G. Ciuprina**, D. Ioan (Editors, 121 authors), *Scientific Computing in Electrical Engineering*, in the Book series *Mathematics in Industry*, vol. 11, 464 pages, Springer, 2007, ISBN 978-3-540-71979-3.
<http://www.springer.com/math/cse/book/978-3-540-71979-3>

Cb2. Munteanu, **G. Ciuprina**, F.M.G.Tomescu, *Modelarea numerică a câmpului electromagnetic prin programe Scilab*, Editura Printech, București, România, 2000, 140 pagini, ISBN 973-652-000-5.
<http://www.lmn.pub.ro/~gabriela/books/mnce2000.pdf>

Cb3. **G. Ciuprina**, D.Ioan, I.Munteanu, M.Rebican, R.Popa, *Optimizarea numerică a dispozitivelor electromagnetice*, 207 pagini, Editura Printech, 2002, ISBN 973-652-465-5. <http://www.lmn.pub.ro/~gabriela/books/opt2002.pdf>

Cb4. D.Ioan, I.Munteanu, B.Ionescu, M.Popescu, R.Popa, M.Lăzărescu, **G.Ciuprina**, *Metode numerice în ingineria electrică*, Editura MATRIX-ROM, București, 1998 (326 pagini), ISBN 973-9390-04-8.

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

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- I1. **G. Ciuprina**, M. Rebican, D.Ioan - *Metode numerice în ingineria electrică - Îndrumar de laborator pentru studenții facultății de Inginerie electrică*, Editura Printech, 2013, 206 pagini, ISBN 978-606-23-0077-7.
http://www.lmn.pub.ro/~gabriela/studenti/lmn/indrumar/IndrumarMN_Printech2013.pdf
- I2. D. Ioan, I. Munteanu, B. Ionescu, M. Popescu, R. Popa, M. Lăzărescu, **G. Ciuprina**, *Metode numerice - îndrumar de laborator*, 328 pagini, litografia UPB, 1995.
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- D1. Anton Duca, Laurentiu Duca, **Gabriela Ciuprina**, Daniel Ioan, „SPSO parallelization strategies for electromagnetic applications” (book chapter), Springer Series in Computational Intelligence, vol 229, pag. 75-95, 2017, ISBN 978-3-319-48506-5, <http://www.springer.com/gp/book/9783319485041> DOI: 10.1007/978-3-319-48506-5_5
- D2. **Gabriela Ciuprina**, Jorge Fernández Villena, Daniel Ioan, Zoran Ilievski, Sebastian Kula, E. Jan W. ter Maten, Karim Mohaghegh, Roland Pulch, Wil H.A. Schilders, L. Miguel Silveira, Alexandra Stefanescu, and Michael Striebel, "Parameterized Model Order Reduction", Book chapter in the book *Coupled Multiscale Simulation and Optimization in Nanoelectronics Series: Mathematics in Industry*, Vol. 21 Subseries: The European Consortium for Mathematics in Industry, Günther, Michael (Ed.), June 2015 <http://www.springer.com/gp/book/9783662466711>, 93 pages, pp.267-359.
- D3. G. Ciuprina, C.B. Diță, M.I. Andrei, and D. Ioan, *Hierarchical Sparse Circuits for the Modeling of Homogeneous Domains in High Frequency ICs*, Book chapter in the book *Advances in Engineering: from theory to application* (E. Andronescu, C. Burileanu, Eds.), Politehnica Press, ISBN 978-605-515-381-3, pp.181-188, 2012.
- D4. D. Ioan and **G. Ciuprina**, *Reduced Order Models of On-chip Passive Components and Interconnects, Workbench and Test Structures*, Book chapter in the book *Model Order Reduction: Theory, Research Aspects and Applications* (W.H.A. Schilders, H.A. van der Vorst, J. Rommes, Eds.), in the book series *Mathematics in Industry*, Springer-Verlag, Heidelberg, ISBN: 978-3-540-78840-9 vol. 13, pp.447-467, 2008.
<http://www.springer.com/math/cse/book/978-3-540-78840-9>
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IV. ARTICOLE / STUDII IN EXTENSO PUBLICATE (R,V)

- Ris** - Reviste de specialitate de circulație internațională recunoscute (cotate / indexate ISI Thomson Reuters, sau indexate în alte Baze de Date Internaționale - BDI specifice domeniului, care fac un proces de selecție a revistelor pe baza unor criterii de performanță). *Se menționează la fiecare lucrare includerea în Baza ISI [ultimul Factor Impact, ISSN] și/sau denumirea altei (altor) BDI.*
- Rio** - Alte reviste de specialitate de circulație internațională.
- Rns** - Reviste de specialitate de circulație națională recunoscute de CNCSIS. Se menționează Categoria CNCSIS.
- Rno** - Alte reviste de specialitate de circulație națională.
- 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. *Se menționează la fiecare lucrare includerea în Baza ISI [ISI Proceedings, ISSN] și/sau denumirea altei (altor) BDI.*
- Vi** - Volumele unor manifestări științifice internaționale recunoscute, organizate în țară și străinătate;
- Vn** - Volumele unor manifestări științifice naționale.
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- Ris1. Anton Duca, Laurentiu Duca, **Gabriela Ciuprina**, Asim Egemen Yilmaz, Tolga Altinoz, "PSO algorithms and GPGPU technique for electromagnetic problems", *International Journal of Applied Electromagnetics and Mechanics*, Vol. 53, pages S249-S259, DOI: 10.3233/JAE-140166, 2017, <https://content.iospress.com/articles/international-journal-of-applied-electromagnetics-and-mechanics/jae140166> ISI Web of Science WOS:000396838100010

- Ris2. **Gabriela Ciuprina**, Daniel Ioan, Rick Janssen, and Edwin van der Heijden, "MEEC Models for RFIC Design Based on Coupled Electric and Magnetic Circuits", IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, Vol. 34, No. 3, pp. 395-408, 2015, <http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=7003979>, ISI Web of Science WOS:000351764500007, DOI: 10.1109/TCAD.2014.2387863
- Ris3. Okkes Tolga Altinoz, Asim Egemen Yilmaz, Anton Duca and **Gabriela Ciuprina**, "Incorporating the Avoidance Behavior to the Standard Particle Swarm Optimization 2011", Advances in Electrical and Computer Engineering, Vol. 15, No. 2, pp. 51-58, 2015. ISI Web of Science WOS 000356808900007, DOI: 10.4316/AECE.2015.02007 <http://www.aece.ro/abstractplus.php?year=2015&number=2&article=7>
- Ris4. Okkes Tolga Altinos, Eren Akca, Asim Egemen Yilmaz, Anton Duca and Gabriela Ciuprina, "Parallel Implementation of Desirability Function-Based Sclarization Approach for Multiobjective Optimization Problems", Informatica Journal of Computing and Informatics, Vol. 39, No.2, pp.115-123, 2015, ISI Web of Science WOS:000362399800003, <http://www.informatica.si/index.php/informatica/article/viewFile/828/624> ISSN: 0350-5596
- Ris5. **Gabriela Ciuprina**, Daniel Ioan, Ioan Alexandru Lazăr, Cosmin Bogdan Diță, *Vector Fitting Based Adaptive Frequency Sampling for Compact Model Extraction on HPC Systems*, IEEE Transactions on Magnetics, vol.48, no.2, pp.431-434, 2012, ISSN 0018-9464, ISI Web on science, WOS:000299509100067 <http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=6136613>
- Ris6. Ioan-Alexandru Lazăr, **Gabriela Ciuprina**, Daniel Ioan, *Effective extraction of accurate reduced order models for HF-ICs using multi-CPU architectures*, Inverse Problems in Science and Engineering, Vol 20, no.1, pp. 15-27, 2012, ISSN 1741-5977, ISI Web of science, WOS:000302054600003 <http://www.tandfonline.com/doi/abs/10.1080/17415977.2011.624622>
- Ris7. Alexandra Raluca Stefanescu, **Gabriela Ciuprina**, Daniel Ioan, *Variability Models for Transmission Lines*, Revue Roumaine des Sciences Techniques - Serie Electrotechnique et Energetique, Vol. 55, no.4, pp. 394-404, 2010. ISSN 0035-4066, ISI Web on science, WOS:000286710100007 <http://revue.elth.pub.ro/upload/219807art07.pdf>
- Ris8. D. Ioan, **G. Ciuprina**, L.M. Silveria, *Effective Domain Partitioning With Electric and Magnetic Hooks*, IEEE Transactions on Magnetics, Vol. 45, no. 3, pp. 1328-1331, 2009. ISSN: 0018-9464, ISI Web on science, WOS:000264019000096 http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=4787316
- Ris9. **Gabriela Ciuprina**, Daniel Ioan, Diana Mihalache, Alexandra Stefanescu, *The Electromagnetic Circuit Element – the Key of Modelling EM Coupled Integrated Components*, Revue Roumaine des sciences techniques – electrotechnique et energetique, vol. 54, no.1 pp. 37-46, 2009. ISI Web on science, WOS:000264503000004 <http://revue.elth.pub.ro/upload/186681Gciuprina04.pdf>
- Ris10. D. Ioan, **G. Ciuprina**, WHA Schilders, *Parametric Models Based on the Adjoint Field Technique for RF Passive Integrated Components*, IEEE Transactions on Magnetics, vol. 44, no.6. pp 1658-1661, 2008. ISSN: 0018-9464, ISI Web on science, WOS:000258183400248, http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=4526900
- Ris11. Daniel Ioan, Wil Schilders, **Gabriela Ciuprina**, Nick van der Meijs, Wim Schoenmaker, *Models for Integrated Components Coupled with their Environment*, COMPEL- The International Journal for Computation and Mathematics in Electrical and Electronic Engineering, vol. 27, no.4, pp.820-829, 2008. ISSN: 0332-1649, ISI Web on science, WOS:000258420500013, <http://www.emeraldinsight.com/10.1108/03321640810878225>
- Ris12. D. Ioan, **G. Ciuprina**, M. Rădulescu and E. Seebacher, *Compact Modeling and Fast Simulation of On-Chip Interconnect Lines*, IEEE Transactions of Magnetics, vol. 42, no. 4, pp 547-550, 2006. ISSN: 0018-9464, ISI Web on science, WOS:000236675200012, http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=1608264
- Ris13. Daniel Ioan, **Gabriela Ciuprina**, Marius Rădulescu, *Absorbing boundary conditions for Compact Modeling of On-chip Passive Structures*, COMPEL: The International Journal for Computation and Mathematics in Electrical and Electronic Engineering, vol. 25, no. 3, pp. 652-659, 2006. ISSN: 0332-1649, ISI Web on science, WOS:000239539900014 <http://www.emeraldinsight.com/10.1108/03321640610666817>
- Ris14. Peter Meuris, **Gabriela Ciuprina** and Ehrenfried Seebacher, *High Frequency Simulations and Compact Models compared with measurements for passive on-chip components*, International Journal of Numerical Modelling: Electronic Networks, Devies and Fields, vol. 18, no. 3, pp. 189-201, John Wiley, 2005, ISI Web on science, WOS:00022908210000

http://www3.interscience.wiley.com/search/allsearch?mode=viewselected&product=journal&ID=109861203&view_selected.x=84&view_selected.y=5

- Ris15. **Gabriela Ciuprina**, Daniel Ioan, Irina Munteanu, *Use of Intelligent-Particle Swarm Optimization in Electromagnetics*, IEEE Transactions on Magnetics, vol. 38, no. 2, pp. 1037-1040, 2002. ISSN: 0018-9464, ISI Web on science, WOS:000175086800181 http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=996266
- Ris16. Daniel Ioan, **Gabriela Ciuprina**, Catalin Ciobotaru, *Hybrid and Concurrent Algorithms for Nonlinear Magnetic Field Problems*, IEEE Transactions on Magnetics, vol. 36, no.4, pp. 1553-1556, 2000. ISSN: 0018-9464, ISI Web on science, WOS:000090067900207 http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=00877735
- Ris17. Daniel Ioan, **Gabriela Ciuprina**, Andras Szigeti, *Embedded Stochastic-Deterministic Optimization Method with Accuracy Control*, IEEE Transactions on Magnetics, vol. 35, no.3, pp. 1702-1705, 1999. ISSN: 0018-9464, ISI Web on science, WOS:000080490900152 http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=00767353
- Ris18. D. Ioan, I. Munteanu, **G.Ciuprina**, *Adjoint Field Technique Applied in Optimal Design of a Nonlinear Inductor*, IEEE Transactions on Magnetics, vol. 34, no.5, pp. 2849-2852, 1998. ISSN: 0018-9464, ISI Web on science, WOS:000075960200110 http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=717663
- Ris19. D.Ioan, **G.Ciuprina**, C.Dumitrescu, *Use of Stochastic Algorithms for Distributed Architectures in the Optimization of Electromagnetic Devices*, IEEE Transactions on Magnetics, vol. 34, no.5, pp. 3000-3003, 1998. ISSN: 0018-9464, ISI Web on science, WOS:000075960200148 http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=00717701
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- Rns1. Aurel-Sorin Lup and **Gabriela Ciuprina**, Analysis of membrane perforations on the RF behavior of capacitive MEMS switches, Acta Electrotehnica, ISSN 1841-3323 vol. 54, no.5, pp. 252-255, 2013. – CNCSIS categoria B+ BDI VINITII (Russia), DOAJ (Sweden)
- Rns2. Iulian Andrei, Emanuela Caciulan, Daniel Dan, **Gabriela Ciuprina**, Daniel Ioan, *Matlab Based Parallel Deterministic Optimization of the Loney's Solenoid*, Acta Electrotehnica, ISSN 1841-3323, vol. 51, no. 5, pp. 9-14, 2010. – CNCSIS categoria B+ BDI VINITII (Russia), DOAJ (Sweden)
- Rns3. Daniel Ioan, **Gabriela Ciuprina**, Wil Schilders, Wim Schoenmaker, Michele Stucchi, Ehrenfried Seebacher, Daniel De Zutter, Joseph Maubach, *Compact Modeling of Passive on-chip Components - European Research Project FP5/IST/CODESTAR*, Revue Roumaine des Sciences Technique - Electrotechnique et Energetique, vol. 51, no. 3, pp. 303-310, 2006.
- Rns4. Daniel Ioan, **Gabriela Ciuprina**, *Improved Algorithms for Solving Nonlinear Equations of the Magnetic Field*, Revue Roumaine des Sciences Technique - Electrotechnique et Energetique, vol. 48, no.2-3, pp. 209-220, 2003.
- Rns5. G.Atanasiu, P.Brad, D.Ioan, **G.Ciuprina**, *Air Gap magnetic permeance estimation for a switched reluctance motor*, Revue Roumaine des Sciences Technique - Electrotechnique et Energetique, vol. 43, no.3, pp. 385-390, 1998.
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- Vis1. Aurel Sorin Lup, **Gabriela Ciuprina**, Daniel Ioan, Anton Duca, Alexandra Stefanescu, Dan Vasilache, Michael Kraft, "Parametric Reduced Order Models in Static Multiphysics Analysis of MEMS Switches", Proceedings of the 10th International Symposium on Advanced Topics in Electrical Engineering (ATEE), Bucharest, Romania, March 23-25, pages 513-518, 2017. WOS:000403399400100
- Vis2. Daniel Ioan, Ruxandra Barbulescu, Jean Ciurea, **Gabriela Ciuprina**, Przemyslaw Syrek, "Simple hierarchical models of the Transcranial Magnetic Stimulation", Proceedings of the 10th International Symposium on Advanced Topics in Electrical Engineering (ATEE), Bucharest, Romania, March 23-25, pages 398-403, 2017. WOS:000403399400078
- Vis3. **Gabriela Ciuprina**, Aurel-Sorin Lup, Bogdan Dita, Daniel Ioan, Dragos Isvoranu, Stefan Sorohan, and Sebastian Kula, "Mixed-domain Macro-Models for RF MEMS Capacitive Switches", Scientific Computing in Electrical Engineering, Springer series on Mathematics in Industry, vol.23, pp.31-39, 2016.
http://link.springer.com/chapter/10.1007/978-3-319-30399-4_4 WOS:000385788900004
- Vis4. Anton Duca, Laurentiu Duca, **Gabriela Ciuprina** and Daniel Ioan, „Neighborhood Strategies for QPSO Algorithms to Solve Benchmark Electromagnetic Problems”. In Proceedings of the 8th International Joint Conference on Computational Intelligence (Porto, Portugal, 2016) - Volume 3: ECTA, ISBN 978-989-758-201-1, pages 148-155. DOI:10.5220/0006040901480155, WOS:000393153900015
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- Vis5. Aurel Sorin Lup, **Gabriela Ciuprina**, Ștefan Sorohan, Dragoș Isvoranu, George Boldeiu, and Alexandra Ștefănescu, „Extraction of Lumped Structural Parameters from Multiphysics Field Simulations for MEMS Switches”, IEEE International Symposium on Fundamentals of Electrical Engineering, ISFEE 2016, 30 June – 2 July, 2016, Bucharest, Romania, 6 pagini, <http://ieeexplore.ieee.org/document/7803194/> WOS:000392434400046
- Vis6. **Gabriela Ciuprina**, Daniel Ioan, Aurel-Sorin Lup, Mihai Popescu, Ruxandra Barbulescu, Alexandra Stefanescu, "Coupled multiphysics-RF reduced models for MEMS", IEEE International Conference on Power Electronics, Intelligent Control and Energy Systems, ICPEICES 2016, 4-6 July 2016, Delhi, India 7 pagini, <http://ieeexplore.ieee.org/document/7853254/> WOS:000400510501029
- Vis7. **Gabriela Ciuprina**, Cosmin-Bogdan Dita, Aurel-Sorin Lup, Daniel Ioan, and Alexandra Stefanescu, "Extraction of TL-lumped RF macromodels for MEMS switches", IEEE MTT-S Int. Conf. on Numerical Electromagnetic and Multiphysics Modeling and Optimization, NEMO 2015, 11-14 August, Ottawa, Canada, 4 pages, <http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=7415062> WOS:000380464100072
- Vis8. Mihai Popescu, Aurel-Sorin Lup, Ruxandra Barbulescu, **Gabriela Ciuprina** and Daniel Ioan, "Using Object Oriented Data Structures for Optimizing MEMS Devices on Parallel Computers", ISEF 2015 - XVII Int. Symp. on Electromagnetic Fields in Mechatronics, Electrical and Electronic Engineering, Valencia Spain, 10-12 Sept. 2015. <http://www.isef2015.upv.es/>
- Vis9. Aurel-Sorin Lup, **Gabriela Ciuprina**, Mihai Popescu and Daniel Ioan, "Parametric Multiphysics 3D Modelling of a Bridge Type MEMS Capacitive Switch", ISEF 2015 - XVII Int. Symp. on Electromagnetic Fields in Mechatronics, Electrical and Electronic Engineering, Valencia Spain, 10-12 Sept. 2015. 8 Pages <http://www.isef2015.upv.es/>
- Vis10. Mihai Popescu, Aurel-Sorin Lup, **Gabriela Ciuprina**, Daniel Ioan, "An object oriented data structure designed for multiphysics simulations on parallel computers", 9th International Symposium on Advanced Topics in Electrical Engineering (ATEE), 7-9 May 2015, Bucharest, Romania, pp. 448-451, DOI:10.1109/ATEE.2015.7133846, <http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=7133846> WOS:000368159800084
- Vis11. Cosmin-Bogdan Dita, Aurel-Sorin Lup, **Gabriela Ciuprina**, Daniel Ioan, "Compact TL-RLC-TL model extraction from FW field solution for RF MEMS capacitive switch", 9th International Symposium on Advanced Topics in Electrical Engineering (ATEE), 7-9 May 2015, Bucharest, Romania pp. 436-441, DOI: 10.1109/ATEE.2015.7133844 <http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=7133844> WOS:000368159800082

- Vis12. G. Boldeiu, D. Vasilache, V. Moagar, A. Stefanescu, **G. Ciuprina**, "Study of the von Mises stress in RF MEMS switch anchors", International Semiconductor Conference (CAS), Sinaia, Romania, 12-14 Oct. 2015, 6 pages. <http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=7355213> WOS:000380566400043
- Vis13. Anton Duca, Laurentiu Duca, **Gabriela Ciuprina**, Daniel Ioan, "GPGPU vs Multiprocessor SPSO Implementations to Solve Electromagnetic Optimization Problems", 7th Int. Conf. on Evolutionary Computation Theory and Applications (ECTA), 12-14 November 2015, Lisbon, Portugal, 11 pages, <http://www.ecta.ijcci.org>
- Vis14. Daniel Ioan, **Gabriela Ciuprina**, W.H.A. Schilders, "Parasitic Inductive Coupling of Integrated Circuits with their Environment", Proceedings of the 2014 International Symposium on Electromagnetic Compatibility (EMC'14/Tokyo), 12-16 May, 2014, Tokyo, Japonia HitotsubashiHall, pages 565-568 IEICE Communication Society <http://www.ieice.org/~emc14/>. WOS:000411491100142
- Vis15. Dragos Isvoranu, Stefan Sorohan, **Gabriela Ciuprina**, "Aerodynamic behavior of the bridge of a capacitive RF MEMS switch", 4th Micro and Nano Flows Conference, UCL, London, UK, 7-10 September 2014, 8 pages, <http://www.mnf2014.com/>
- Vis16. Aurel-Sorin Lup, **Gabriela Ciuprina** and Stefan Sorohan, "Parametric Multiphysics Static Models for a Bridge Type MEMS Capacitive Switch", Proceedings of the 49th IEEE International Universities Power Engineers Conference, 2-5 sept 2014, Cluj-Napoca, Romania, ISBN 978-1-4799-6556-4, pages 1-5, <http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=6934635> WOS:000364087800041
- Vis17. Aurel-Sorin Lup, **Gabriela Ciuprina**, Alexandra Stefanescu, "Extraction of effective elastic coefficient from a coupled structural electrostatic simulation of a MEMS switch", Proceedings of the International Symposium on Fundamentals of Electrical Engineering, 28-29 November 2014, Bucharest, Romania, pages 1-5, <http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=7050539> DOI: 10.1109/ISFEE.2014.7050539 WOS:000380570500007
- Vis18. O. Tolga Altinoz, A. Egemen Yilmaz, Anton Duca and **Gabriela Ciuprina**, "Particle Swarm Optimization with Social Exclusion and its Application in Electromagnetics", Proceedings of the 14th International Conference on Optimization of Electrical and Electronic Equipment, May 22-24, 2014, Brasov, Romania, 6 pages, <http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=6851032> ISI Web of science WOS:000343551300016
- Vis19. Ruxandra Barbulescu, Aurel-Sorin Lup, **Gabriela Ciuprina**, Daniel Ioan, A. Egemen Yilmaz, "Intelligent Particle Swarm Optimization of Superconducting Magnetic Energy Storage Devices", International Symposium on Fundamentals of Electrical Engineering, 28-29 November 2014, Bucharest, Romania, pages 1-4. DOI: 10.1109/ISFEE.2014.7050607, <http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=7050607> WOS:000380570500075
- Vis20. **Gabriela Ciuprina**, Daniel Ioan, and Mihail-Iulian Andrei, *Effective HF Modeling of Passive Devices based on Frequency Dependent Hodge Operators and Model Order Reduction*, Proceedings of the 34th Progress In Electromagnetics Research Symposium (PIERS) in Stockholm, SWEDEN, 12-15 August, 2013, pp. 310-314. ISSN 1559-9450 BDI PIERS online <https://jpier.org/piersproceedings/piers2013StockholmProc.php?start=50>
- Vis21. Mihail-Iulian Andrei, Cosmin-Bogdan Dita, **Gabriela Ciuprina** and Daniel IOAN, *Effective Modeling of HF Integrated Components with Domain Partitioning and Order Reduction*. Proceedings of the 8th International Symposium on Advanced Topics in Electrical Engineering, May 23-25, 2013, Bucharest, Romania, 4 pages. ISBN 978-1-4673-5978-8 IEEEExplore Digital Object Identifier : 10.1109/ATEE.2013.6563446 http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=6563446 WOS:000332928500100
- Vis22. O. Tolga Altinoz, A. Egemen Yilmaz, **Gabriela Ciuprina**, *A Multiobjective Optimization Approach via Systematical Modification of the Desirability Function Shapes* Proceedings of the 8th International Symposium on Advanced Topics in Electrical Engineering, May 23-25, 2013, Bucharest, Romania, 6 pages, ISBN 978-1-4673-5978-8 BDI IEEEExplore, Digital Object Identifier :10.1109/ATEE.2013.6563481 http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=6563481 WOS:000332928500135

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- Vi.9. **Gabriela Ciuprina**, Daniel Ioan, *TEAM Problem 22 Solved by a Distributed Stochastic-Deterministic Algorithm with Accuracy Control*, Proceedings of the TEAM Workshop, 7th Round, Tucson, Arizona, pp.2-4, 1998.
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- Vn.2. **Gabriela Ciuprina**, Daniel Ioan, Ioan-Alexandru Lazăr, Iulian Andrei, *Adaptive Frequency Sampling for the Effective Extraction of Reduced Order Models for HF-ICs Passive Components*. Simpozionul Național de Electrotehnică Teoretică, SNET 2010. ISSN 2067-4147, 6 pagini
- Vn.3. Alexandru Lazăr, Radu Popescu, **Gabriela Ciuprina**, Daniel IOAN, *Parallel iterative techniques for the extraction of line parameters of interconnects*, . Simpozionul Național de Electrotehnică Teoretică, SNET 2009, Politehnica University of Bucharest, Romania , 27 Noiembrie 2009, pp.69-74
- Vn.4. **Gabriela Ciuprina** and Daniel Ioan, *Importance of the Terminal Excitation Type on System Representation for Model Order Reduction Procedures*, 6th Symposium on Advanced Techniques in Electrical Engineering, ATEE 08, Bucuresti, pp. 121-125, 2008. ISBN 978-606-521-137-7
- Vn.5. Daniel Ioan, **Gabriela Ciuprina**, *Very Fast Simulation Strategy (VFSS) developed by PUB/LMN team within the CODESTAR project*, Symposium on Advanced Topics in Electrical Engineering (ATEE) – Workshop on Compact Modelling of ON-chip Passive Structures at High Frequencies, 6 pages, Bucharest, 2004.
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- Vn.7. Melinda Mandruta, **Gabriela Ciuprina**, Daniel Ioan, Peter Meuris, *Reduced-Order Macromodel Extracted from the Frequency Domain Simulator of Passive On-Chip Components*, Symposium on Advanced Topics in Electrical Engineering (ATEE) – Workshop on Compact Modelling of On-chip Passive Structures at High Frequencies, 4 pages, Bucharest, 2004.
- Vn.8. Diana Mihalache, **Gabriela Ciuprina**, Daniel Ioan, *Codestar Benchmarks Structures: Comparison between Measurements and Simulations*, Symposium on Advanced Topics in Electrical Engineering (ATEE) – Workshop on Compact Modelling of On-chip Passive Structures at High Frequencies, 6 pages, Bucharest, 2004.

- Vn.9. Anca Tomescu, Sorin Antoniu, **Gabriela Ciuprina**, Stefan Cöller, *Integrated Magnetically Actuated Microrelay*, Symposium on Advanced Topics in Electrical Engineering (ATEE), pp. 163-167, Bucharest, 2004.
- Vn.10. Anca Tomescu, Sorin Antoniu, **Gabriela Ciuprina**, Petru Gabriel Taflan, *Electrostatic Angular Microactuator*, Symposium on Advanced Topics in Electrical Engineering (ATEE), pp. 201-206, Bucharest, 2004.
- Vn.11. **Gabriela Ciuprina**, Suzana Stanescu, Daniel Ioan, *Efficiency and Accuracy in the Optimization of a Die Press Model*, Symposium on Advanced Topics in Electrical Engineering (ATEE), pp. 49-53, Bucharest, 1998.
- Vn.12. B.Vasilii, I.Munteanu, D.Ioan, **G.Ciuprina**, *Use of Message-Passing Distributed Architecture in Optimisation of a SMES*, Proceedings of the 4-th Romanian Conference on Open Systems (ROSE 96), pp 72-79, Bucharest, Romania, 1996.
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V. BREVETE DE INVENȚIE / INOVAȚII (B,A)

- B - Brevete de invenție. - N/A
A - Inovații și alte creații. - N/A

VI. CONTRACTE ȘI RAPOARTE ȘTIINȚIFICE (P,F)

- P – Proiecte de cercetare-dezvoltare – inovare obținute prin competiție, pe bază de contract/grant, în țară/străinătate (Pn – naționale, Pi - internaționale).
F – Alte lucrări de cercetare – dezvoltare
Obs.-a se menționa calitatea de responsabil/director sau coautor.
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- Pn.1. **Director de proiect** - *Instrumente software avansate și metodologii pentru modelarea multifizică și simularea microcomutatoarelor de radio-frecvență - ToMeMS*, (PN-II-PT-PCCA-2011-3.1-0842) nr 5 / 03.07.2012, <http://mems.lmn.pub.ro>, 2012-2016.
- Pn.2. **Responsabil de proiect** din partea UPB - *Senzor de temperatura bazat pe structuri de tip SAW pe AlN/Si cu frecvența de rezonanță în domeniul gigahertzilor - SETSAL* (PN-II-PT-PCCA-2013-4) nr 15 / 21.08.2014), 2014-2016.
- Pn.3. **Director de proiect** - *Instrumente software avansate pentru modelarea câmpului electromagnetic în blocurile de radio frecvență - STAR*, CNCISIS (UEFISCSU) nr. 609 / 16.01.2009, <http://idei.lmn.pub.ro/star/>, 2009-2011.
- Pn.4. **Director de proiect** - *Promovarea participării la programele europene de cercetare a comunității științifice naționale implicată în domeniul calculului științific în ingineria electrică - proSCEE*, CEEX – Modul III, nr 261 / 01.08.2006, <http://prosee.lmn.pub.ro/>, 2006-2008 .
- Pn.5. Cercetator - *Metodologii și instrumente pentru proiectarea nano-electronica automată - nEDA*, CEEX – Modul I, nr 03 / 06.10.2005, <http://neda.lmn.pub.ro/>, 2005-2008
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- Pi.1. Cercetator: COST-TD1307- European Model Order Reduction Network <http://mornet.lmn.pub.ro/> 2013-2018
- Pi.2. **Co-director de proiect**, "Instrumente software avansate pentru modelare electromagnetică și optimizare - ASTEMO", Bilaterală România-Turcia prin programul Capacități/Modulul III, ANCS-UEFISCDI (contract nr. 605/01.01.2013) și TUBITAK (contract nr. 112E168); 01.01.2013-31.12.2014. Partner: Ankara University, Turcia.
- Pi.3. Cercetator: *CHAMELEON RF Comprehensive High-Accuracy Modelling of Electromagnetic Effects in Complete Nanoscale RF Blocks*, FP6-IST, Area: Nanoelectronics, Contract no: 027378, 2005-2008. <http://www.hitech-projects.com/euprojects/chameleon%20RF/>
- Pi.4. Cercetator: *CODESTAR - Compact modeling of on-chip passive structures at high frequencies*, FP5-IST, Area: Microelectronics technologies: processes, equipment and devices, Contract no:34058, 2002-2004 <http://www.magwel.com/codestar/>
- Pi.5. Cercetator: EST3 - Early Stage research Training at an EaSTern European Site with Tradition, http://www.lmn.pub.ro/prj_est3.html 2005-2009.

Pi.6. Cercetator: ToK4nEDA - Transfer of Knowledge for nano-Electronic Design Automation, http://www.lmn.pub.ro/prj_tok.html 2005-2010.

Pi.7. Cercetator: COMSON - COupled Multiscale Simulation and Optimization in Nanoelectronics http://www.lmn.pub.ro/prj_comson.html 2005-2009.

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- F1. *Metode noi pentru rezolvarea problemelor standard de evaluare a analizei numerice a campului electromagnetic (TEAM Workshop Benchmarks)*. Raport LMN 6/96 - FLD - CC - ALL, finantat partial de MCT/510A78/96, 1996. Responsabil raport cercetare
- F2. *Tehnici avansate pentru analiza numerica a campului electromagnetic* - Raport LMN 3/95 - FLD - CC - ALL, 1995. Responsabil raport cercetare
- F3. *Calculul numeric al distributiei campului electromagnetic intr-un dispozitiv electromagnetic cu ferita, determinarea din aceasta a unor parametri de interes si optimizare*. Beneficiar – Societatea Comerciala AFERRO s.a., contract 2 - 93 - 9 din 28 septembrie 1993. Responsabil raport cercetare
- F4. *Calcul de inalta performanta: studii privind algoritmi, arhitecturi si metode specifice -- Pachete de programe pentru modelarea dispozitivelor electromagnetice*. Raport LMN 3/01, contract ANSTI/ICI A7.
- F5. *Perfectionarea inginerilor si evaluarea cunostintelor prin INTERNET – Dezvoltarea unui mediu dedicat perfectionarii inginerilor prin INTERNET*. Raport LMN 2/01, contract MEC/ICI 501/2001 AA1/2001 A13.
- F6. *Tehnici numerice eficiente pentru analiza asistata de calculator a dispozitivelor electromagnetice de joasa si inalta frecventa – Tehnici si algoritmi pentru modelarea geometrica partilor componente ale dispozitivelor electromagnetice*. Raport LMN 1/01, contract 34967/2001, nr. Tema 125, cod MEC – 113.
- F7. *Instrumente software pentru instruire la distanta prin Internet*. Raport LMN 5/00 - CMP - CC - ALL, contract B13, ANSTI/ICI, 2000.
- F8. *Efecte de camp electromagnetic in circuite electrice cu parametri distribuiti – Modele de ordin redus pentru elementele de circuit electric cu efect de camp*. Raport LMN 2/00 - OTH - CC - ALL, contract nr.95, MEN, 2000.
- F9. *Realizarea de programe si algoritmi pentru calculul de inalta performanta, inclusiv arhitecturi paralele – Procedura de modelare asistata de calculator a dispozitivelor electromagnetice*. Raport LMN 7/00 - CMP - CC - ALL, contract A65 ANSTI/ICI, 2000.
- F10. *Realizarea de programe si algoritmi pentru calculul de inalta performanta, inclusiv arhitecturi paralele - Studiu privind programe si algoritmi pe arhitecturi paralele pentru dispozitive electromagnetice*. Raport LMN 6/00 - CMP - CC - ALL, contract A65 ANSTI/ICI, 2000.
- F11. *Efecte de camp electromagnetic in circuite electrice cu parametri distribuiti - Studiu privind modelarea interconexiunilor in circuitele integrate*. Raport LMN 7/98 - CMP - CC - ALL, contract 32/tema 597/73/M.E.N./C.N.C.S.U, 1998.
- F12. *Tehnici de testare nedistructiva - Extragerea caracteristicii de magnetizare folosind dispozitive cu camp neuniform*. Raport LMN 6/98 - CMP - CC - ALL, contract 836/B9/M.C.T, 1998.
- F13. *Realizarea de programe si algoritmi pentru calculul de inalta performanta, inclusiv arhitecturi paralele - Studiu privind analiza numerica a campului electromagnetic in configuratii complexe prin tehnici de calcul de inalta performanta*. Raport LMN 5/98 - CMP - CC - ALL, contract 883/A5/M.C.T, 1998.
- F14. *Calcul de inalta performanta: studii privind algoritmi, arhitecturi si metode specifice - Studiu privind utilizarea tehnicilor concurente in arhitecturile distribuite pentru rezolvarea problemelor de optimizare*. Raport LMN 4/98 - CMP - CC - ALL, contract 883/A4/M.C.T, 1998.
- F15. *Metode noi pentru rezolvarea problemelor standard de evaluare a analizei numerice a campului electromagnetic (TEAM Workshop Benchmarks) - Solutie hibrida stocastic-determinista pentru problema de optimizare TEAM 22)*. Raport LMN 3/98 - CMP - CC - ALL, contract 836/A94/M.C.T, 1998.
- F16. *Tehnici de testare nedistructiva bazate pe un nou principiu de masurare a campului magnetic (MANODET) - Modele de inalta frecventa pentru senzorul FLUXSET*. Raport LMN 2/98 - CMP - CC - ALL, contract 836/A21/Faza II/M.C.T si INCO-COPERNICUS-MANODET, 1998.
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- F18. *Metode noi pentru rezolvarea problemelor standard de evaluare a analizei numerice a campului electromagnetic (TEAM Workshop Benchmarks) - diseminare rezultate privind probleme standard TEAM prin Internet/Web*. Raport LMN 12/97 - FLD - CC - ALL, contract 836/A85/MCT, 1997.
- F19. *Metode noi pentru rezolvarea problemelor standard de evaluare a analizei numerice a campului electromagnetic (TEAM Workshop Benchmarks)*. Raport LMN 11/97 - FLD - CC - ALL, contract 836/A85/MCT, 1997.
- F20. *Tehnici de testare nedistructiva bazate pe un nou principiu de masurare a campului magnetic (MANODET) - studii privind modelarea electromagnetica a senzorului pentru camp magnetic*. Raport LMN 9/97 - CMP - CC - ALL, contract 836/B47/MCT, 1997.

- F21. *Realizarea de programe si algoritmi pentru calculul de inalta performanta, inclusiv arhitecturi paralele.* Contract 883/A6/MCT, raport LMN 2/97 - CMP - CC - ALL, 1997.
- F22. *Calculul de inalta performanta: studii privind algoritmi, arhitecturi si metode specifice.* Contract 883/A5/MCT, raport LMN - 1/97 - CMP - CC - ALL, 1997.
- F23. *Tehnici avansate pentru analiza numerica a campului electromagnetic* - Raport LMN 3/97 - FLD - CC - ALL, Contract 1332/C.N.C.S.U., 1997.
- F24. *Calculul de inalta performanta: studii privind algoritmi, arhitecturi si metode specifice.* Raport LMN 4/96 - CMP - CC - ALL. Contract 883/A4/MCT, 1996.
- F25. *Tehnici avansate pentru analiza numerica a campului electromagnetic* - Raport LMN 2/96 - FLD - CC - ALL, finantat partial de grant M.I. / C.N.C.S.U / 5001 / 275, 1996.
- F26. *Metode noi pentru rezolvarea problemelor standard de evaluare a analizei numerice a campului electromagnetic (TEAM Workshop Benchmarks).* Raport LMN 2/95 - FLD - CC - ALL, 1995.

VII. COMUNICĂRI ȘTIINȚIFICE NEPUBLICATE (E)

E – Lucrări prezentate la diferite seminarii/expoziții, conferințe, etc.

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