

LISTA DE LUCRĂRI

Prof. em. dr. ing. Daniel Ioan

I. TEZA (E) DE DOCTORAT (T)

Daniel Ioan Regimul tranzitoriu al campului electromagnetic in medii neliniare - abordare sistemica si scheme echivalente. Conducator: C.I. Mocanu, Institutul Politehnic Bucuresti, 1978

II. CĂRȚI PUBLICATE (C)

Ca – Cărți / cursuri (manuale) pentru uzul studentilor, publicate în edituri recunoscute.

1. D. Ioan. Electrotehnica si electronica industrială, vol. 3. Editura I.P.B., Bucuresti, 1985.
2. D. Ioan. Electrotehnica si electronica industrială, vol. 2. Editura I.P.B., Bucuresti, 1984.
3. D. Ioan. Electrotehnica si electronica industrială, vol. 1. Editura I.P.B. Bucuresti, 1983.
- 4 Daniel Ioan, Irina Munteanu, Bogdan Ionescu, Mihai Popescu, Radu Popa, Mihai Lăzărescu, Gabriela Ciuprina. Metode numerice în ingineria electrică. MATRIX ROM, București, 1998. ISBN 973-9390-04-8.
5. Daniel Ioan, Irina Munteanu. Metode Numerice: Aplicatii in ingineria electrica. Universitatea "Politehnica" din Bucuresti, Editura UPB, Bucuresti, 1995. (330 pag.)
6. Daniel Ioan. Metode pentru calculul campului electromagnetic. Separarea variabilelor, Institutul Politehnic Bucuresti, Editura IPB, Bucutesti, 1988

Cb - Cărți de specialitate publicate în edituri recunoscute (autor, coautor, editor).

1. Ciuprina, Gabriela, and Daniel Ioan, eds. *Scientific Computing in Electrical Engineering*. Vol. 11. Springer Science & Business Media, 2007.
- 2, Daniel Ioan, Gabriela Ciuprina, Wilhelmus HA Schilders Complexity reduction of electromagnetic systems 145-200 chapter in Benner, Peter, et al. (ed) *Model order reduction: volume 3 applications*. De Gruyter, 2020.
3. K. Nagaya, D. Ioan (Eds.). Applied Electromagnetics and Mechanical Systems. vol 8 JSAEM, Proceedings of the Second Japan Romania Joint Seminar on Applied Electromagnetics and Mechanical Systems 16-18 November, 1998, Kiryu, Japan Society of Applied electromagnetics and Mechanics, Tokyo, ISBN 4-931455-07-7

Cc - Cărți publicate în alte edituri, cu ISBN.

- 1 G. Ciuprina, D.Ioan, I.Munteanu, M.Rebican, R.Popa, Optimizarea numerica a dispozitivelor electromagnetice , (207 pagini), Editura Printech, 2002. ISBN 973-652-465-5
- 2 Irina Munteanu, Daniel Ioan. Utilizarea Instrumentelor Unix în știință și inginerie MATRIX ROM, București, România, 1999. (257 pag.), ISBN 973 685 004 8.
3. D. Ioan (Ed). Proceedings of International Conference on Computer Aided Engineering

Education - CAEE'93, September 22-24, 1993, Bucharest, Vol.1,2 Editura Clubului TEMPUS, Bucuresti, 1993.

- 4 R. Radulet, Al. Timotin, S.E. Ghetaru, D. Ioan, si altii. IEC Thesaurus Concepts in Electricity, First English Edition. International Electrotechnical Commission, CEI, Geneve, Suisse, 1989.
5. R. Radulet, Al. Timotin, S.E. Ghetaru, D. Ioan si altii. Thesaurus CEI rationnel de l'electricite.Commission Electrotechnique Internationale, CEI, Geneve, Suisse, 1986.

III.ALTE MATERIALE PUBLICATE (I,D)

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

- 1 N. Cristea, S. Antoniu, L. Constantinescu, F. Hantila, D. Ioan, altii. Culegere de probleme de electrotehnica. Editura I.P.B., Bucuresti, 1979.
- 2 Antoniu, I. Dorobantu, D. Ioan, altii. Bazele electrotehnicii - Indrumar de laborator . Editura I.P.B., Bucuresti, 1978
3. M. Preda, P. Cristea, F. Manea (coordonatori), D. Ioan, altii. Bazele electrotehnicii - Probleme. Editura Didactica si Pedagogica, Bucuresti, 1980.
4. F.M.G. Tomescu, R. Marculescu, D. Ioan, A. Tomescu. Electrotehnica si Electronica Indrumar de laborator . Editura I.P.B., Bucuresti, 1983.

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

1. G Ciuprina, D Ioan, RV Sabariego Electric circuit element boundary conditions in the finite element method for full-wave passive electromagnetic devices Journal of Mathematics in Industry 12 (1), 7
2. D. Ioan, Irina Munteanu, B. Ionescu, M. Popescu, R. Popa - Computer aided learning of numerical methods for electrical engineers, in 3rd World Conf. on Engineering Education pp. 15-20, Portsmouth, United Kingdom, sept. 20-25, 1992.in T. .V. Duggan (ed.). Industrial links, computers and designs. Computational Mechanics Publications, Southampton, Boston, 1992. ISBN 1562521179, 9781562521172
3. Daniel Ioan, S. Popescu, S. Spanoche, C. Dan. A Comparison between two CMOS Magnetic Sensor for ETC. in Nondestructive Testings of Materials, pp. 125-134. R. Collins, W.D. Dover, J.R. Bowler and K. Miya (Ed), IOS Press, Amsterdam, 1995, ISBN 90 5199 239 4
4. Dogaru, R; Murgan, AT; Ioan, D; et al. Chains of discrete-time chaotic neural networks for generation of broadband signals with applications in improved ciphering systems Melecon '96 - 8th Mediterranean Electrotechnical Conference Proceedings, Vols I-III Pages: 635-637, IEEE, 1996 ISBN 0-7803-3109-5
5. D. Ioan, I.F. Hăntilă, M. Rebican și C. Constantin. FLUXSET sensor analysis based on nonlinear magnetic wire model of the core. Electromagnetic Nondestructive Evaluation (II), vol. 14, pp. 160-169. R. Albanese, G. Rubinacci, T. Takagi and S.S. Udpa (Ed), IOS Press, Amsterdam, 1998. ISBN905199375 7.
6. D. Ioan, M. Rebican, G. Ciuprina, P. Leonard. 3D FEM model of a FLUXSET sensor. Electromagnetic Nondestructive Evaluation (II), vol. 14, pp. 152--159. R. Albanese, G.

- Rubinacci, T. Takagi and S.S. Udpa (Ed), IOS Press, Amsterdam, 1998. ISBN 90 5199 375 7. 6 D. Ioan, M. Rebican, M. Iordache. Approximate SPICE models of nonlinear magnetic circuits based on field solution. Electromagnetic Nondestructive Evaluation (II), vol. 14, pp.120--128. R. Albanese, G. Rubinacci, T. Takagi and S.S. Udpa (Ed), IOS Press, Amsterdam, 1998. ISBN 90 5199 375
7. Daniel Ioan, Alessandro Formisano, Antal Gasparics, Irina Munteanu, Mihai Rebican. High frequency models for the NDT magnetic field sensors. Electromagnetic Nondestructive Evaluation, vol. III, pp. 14--25. IOS Press Amsterdam, D. Lesselier and A. Razek (Eds), 1999. ISBN: 90 5199 375
 8. Gabriela Ciuprina, Daniel Ioan, Distributed Evolutionary Strategies for Electromagnetic Devices Optimization, Applied Electromagnetics and Mechanical Systems, pp.386-391, Japan Society of Applied Electromagnetics and Mechanics, Tokyo, 1999. ISBN, 4931455077 9. Daniel Ioan, Anton Duca. Use of MTANN Systems to Solve Inverse ENDE Problems. Electromagnetic Nondestructive Evaluation (IV), vol. 17, pp. 159-166. S.S. Udpa and T. Takagi J. Pavo and R. Albanese (Ed), IOS Press, Amsterdam, 2000. ISBN 90 5199 445 5.
 9. Pavo, J; Ioan, D; Novotny, P; et al. Development of an innovative eddy current material evaluation technique in Non-Linear Electromagnetic Systems, Di Barba, P., Savini, A. (ed) Pages: 249-252, IOS Press Amsterdam, 2000, ISBN: 978-1- 58603-024-7
 10. Duca, A; Ioan, D A Hybrid Transform-Neural Network approach for the inverse problem in NDET in Non-Linear Electromagnetic Systems, Di Barba, P., Savini, A. (ed) Pages: 269-272, IOS Press Amsterdam, 2000, ISBN: 978-1-58603-024-7
 11. Daniel Ioan, Mihai Rebican, Anton Duca. Use of Evolutionary Agents to Solve ENDE Inverse Problems. Electromagnetic Nondestructive Evaluation (V), vol. 21, pp.59-66. J. Pavo and G. Vertesy and T. Takagi and S.S. Udpa (Ed), IOS Press, Amsterdam, 2001. ISBN 58603 155 4.
 12. Daniel Ioan, Irina Munteanu. A Survey on Parameter Extraction Techniques for Coupling Electromagnetic Devices to Electric Circuits. Scientific Computing in Electrical Engineering, vol. 18, pp. 337-357. Ursula van Rienen and Michael Gunther and Dirk Hecht (Ed.), Springer Verlag, Berlin, 2001. ISBN 10: 3540421734
 13. Daniel Ioan, Marius Radulescu, Gabriela Ciuprina, Fast Extraction of Static Electric Parameters with Accuracy Control, in Scientific Computing in Electrical Engineering (W.H.A.Schielders et al Eds), Springer-Verlag, Heidelberg, 2004, Germany, pp.248-256. ISBN-10: 3540213724
 14. Ioan, D; Ciuprina, G; Radulescu, M; et al. Theorems of parameter variations applied for the extraction of compact models of on-chip passive structures, ISSCS 2005: Signals, Circuits and Systems, Proceedings Pages: 147-150, IEEE, 2005 ISBN 0- 7803-9029-6,
 15. D. Ioan, Gabriela Ciuprina, M. Radulescu and M. Piper Algebraic Sparsefied Partial Equivalent Circuit (ASPEEC) in Scientific Computing in Electrical Engineering, vol 2 (M. A. Anile et al Eds), pp 45-50, Springer-Verlag, Heidelberg, 2006. ISBN: 9783540328612
 16. G. Ciuprina, D. Ioan and D. Mihalache, Reduced Order Electromagnetic Models based on dual Finite Integrals Technique, Book chapter in the book Scientific Computing in Electrical Engineering, in the book series Mathematics in Industry (G. Ciuprina, D. Ioan

- Eds) , Vol. 11, pp. 287-294, Springer-Verlag, Heidelberg 2007, ISBN 978-3-540-71979-3
17. D. Ioan, G. Ciuprina "Reduced Order Electromagnetic Models of On-chip Passive Components and Interconnects, Workbench and Test Structures for Integrated passive components", Pages 447-467 in Reduced order modeling, (W.H.A. Schilders, H.A. van der Vorst, J. Rommes, Eds). "Model Order Reduction: Theory, Research Aspects and Applications", Springer series on Mathematics in Industry, Springer-Verlag, Heidelberg, 2008, ISBN 978-3-540- 78840-
 18. Khaderi, S. N.; Ioan, D.; Den Toonder, J. M. J.; et al. Nature-inspired microfluidic manipulation using magnetic actuators in Microelectromechanical Systems - Materials and Devices Volume: 1052 Pages: 297-303 , MRS - Materials Research Society (USA), 2008, ISBN-10: 1558999906
 19. Bi, Yu; van der Kolk, K.; Ioan, D.; et al. Sensitivity Computation of Interconnect Capacitances with respect to Geometric Parameters, 2008 Ieee-Epex Electrical Performance of Electronic Packaging, Pages: 193-196, IEEE, 2008, ISBN 1424428734
 20. Niehof, J.; Janssen, H. H. J. M.; Schilders, W. H. A.; Ioan, D. et al. Domain decomposition via electromagnetic hooks for the modeling of complete RF blocks SPI08 Signal Propagation on Interconnects, Pages: 64-67 IEEE, 2008, DOI 10.1109/SPI.2008.4558330 , ISBN 978-1-4244-2317-0
 21. Stefanescu, Alexandra; Ciuprina, Gabriela; Ioan, Daniel; et al., Models for variability of transmission line structures SPI08 Ieee Signal Propagation on Interconnects, Pages: 232-235 IEEE, 2008 DOI 10.1109/SPI.2008.4558330 ISBN 978-1-4244-2317-0
 22. Daniel Ioan and Gabriela Ciuprina, Reduced Order Models of On-Chip Passive Components and Interconnects Workbench and Test Structures, in Model Order Reduction: Theory, Research Aspects and Applications, Wilhelmus H. A. Schilders, Henk A. van der Vorst and Joost Rommes Mathematics in Industry, Volume 13, III, 447-467, DOI: 10.1007/978-3-540-78841-6_20, Springer-Verlag, Heidelberg, 2008, ISBN 978-3-540-78840-
 23. Khaderi, S. N.; Baltussen, M. G. H. M.; Anderson, P. D.; Ioan, D. et.al, Artificial Cilia: Mimicking Nature Through Magnetic Actuation, Materials and Strategies For Lab-on-a-Chip - Biological Analysis, Cell-Material Interfaces and Fluidic Assembly of Nanostructures Volume: 1191 Pages: 45-50 , S. Khan, S. Murthy, V. Ugaz, H. Zeringue (editors) MRS - Materials Research Society (United States), 2009, ISBN10: 1605111643
 24. Villena, Jorge Fernandez; Ciuprina, Gabriela; Ioan, Daniel; et al. On the Efficient Reduction of Complete EM based Parametric Models in : Date: 2009 Design, Automation & Test in Europe, Vols 1-3 Pages: 1172-1177, IEEE, ACM, European Design and Automation Association, 2009, ISBN 9781424437818
 25. Gabriela Ciuprina, Daniel Ioan, Dragos Niculae, Jorge Fernández Villena and Luis Miguel Silveira Parametric Models Based on Sensitivity Analysis for Passive Components Studies in Computational Intelligence, 2008, Volume 119, Intelligent Computer Techniques in Applied Electromagnetics, Pages 231-239 Slawomir Wiak (Editor), Andrzej Krawczyk (Editor), Ivo Dolezel (Editor), Springer-Verlag, Heidelberg, 2009, ISBN-10: 3642097235
 26. Gabriela Ciuprina, Alexandra Ștefănescu, Daniel Ioan, Frequency dependent parametric models for transmission line structures, Computer field models of electromagnetic

- devices (S. Wiak, E. Napieralska-Juszczak Eds), pp.618-625, IOS Press, 2010. ISBN 978-1-60750-603-4
28. Alexandra Stefanescu, Daniel Ioan and Gabriela Ciuprina, Parametric Models of Transmission Lines Based on First Order Sensitivities Mathematics in Industry, 1, Volume 14, Scientific Computing in Electrical Engineering SCEE 2008, Pages 29-36 Costa, Luis R.J.; Roos, Janne (Eds.), Springer-Verlag, Heidelberg, 2010, 588 p. ISBN 978-3-642-12293-4
27. Gabriela Ciuprina, Daniel Ioan, Diana Mihalache and Ehrenfried Seebacher Domain Partitioning Based Parametric Models for Passive On-Chip Components Mathematics in Industry, 1, Volume 14, Pages 37-44 in Scientific Computing in Electrical Engineering SCEE 2008 Costa, Luis R.J.; Roos, Janne (Eds.) Springer-Verlag, Heidelberg, 2010, ISBN 978-3-642-12293-4
28. Ioan-Alexandru Lazăr, Gabriela Ciuprina, Daniel Ioan, Effective extraction of accurate reduced order models for HF-ICs using multi-CPU architectures, Inverse Optimization and Inverse Problems, Electromagnetism - OIPE 2010, Proceedings, Ivan Yatchev, Iliana Marinova (Eds.), pages 5-8, TU Sofia, 2010 ISBN 978-954-438-855-3
29. Ionita, Valentin; Ioan, Daniel Magnetic Torque Evaluation for Magnetized Nanoparticles in Applied Electromagnetic Engineering For Magnetic, Superconducting and Nanomaterials A.G. Mamalis, M. Enokizono and A. Kladas (Eds.), Volume: 670 Pages: 103-109, Trans Tech Publications - TTP, 2011, ISBN: 978-0-87849-215-2
30. Daniel Ioan, Gabriela Ciuprina and Ioan-Alexandru Lazar, Substrate Modeling Based on Hierarchical Sparse Circuits Mathematics in Industry, 1, Volume 16, Scientific Computing in Electrical Engineering SCEE 2010, Part 2, Bastiaan Michielsen, Jean-René Poirier (Eds) Pages 143-152 Springer-Verlag, Heidelberg, 2012, ISBN-10: 3642224520

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

Ris - Reviste de specialitate de circulație internațională recunoscute (cotate / indexate WOS, sau indexate în alte 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 WOS [Accession Number, WOS, ultimul Factor Impact, ISSN] și/sau denumirea altei BDI.*

Baza WOS

COMPEL ISSN: 0332-1649 IF 1,0

Journal of Computational Neuroscience ISSN 0929-5313 IF 1,7

UPB **SCIENTIFIC BULLETIN, Series C** □ **Electrical Engineering and Computer Science**

ISSN (print): 2286-3540 / (online): 2286-3559

Revue Roumaine Des Sciences Techniques-Serie Electrotechnique Et Energetique **ISSN: 0035-4066** Journal Impact Factor (JIF): 1 indexed by SCOPUS, INSPEC, EBSCO

Medical Engineering & Physics - 1350-4533 **ISSN: 1350-4533. 5 Year impact factor: 2.1.**

PHYSICA B Journal ISSN: 0921-4526 IF 2.8

1. Physics-aware macromodels for MEMS switches

Lup, AS; Ciuprina, G; Ioan, D, Vasilache, D Apr 27 2020

COMPEL-THE INTERNATIONAL JOURNAL FOR COMPUTATION AND

MATHEMATICS IN ELECTRICAL AND ELECTRONIC ENGINEERING 39 (2) ,
pp.497-509

2. Simplification by pruning as a model order reduction approach for RF-MEMS switches
Ciuprina, G; Ioan, D; 2020 COMPEL-THE INTERNATIONAL JOURNAL FOR
COMPUTATION AND MATHEMATICS IN ELECTRICAL AND ELECTRONIC
ENGINEERING 39 (2) , pp.511-523
2. Reduced order models of myelinated axonal compartments
Ioan, D; Barbulescu, R; Ciuprina, G. Dec 2019. JOURNAL OF COMPUTATIONAL
NEUROSCIENCE 47 (2-3) , pp.141-166
3. COUPLED MACROMODELS FOR THE SIMULATION OF THE SALTATORY
CONDUCTION
*Barbulescu, R; Ioan, D and Ciuprina, G 2019 UNIVERSITY POLITEHNICA OF
BUCHAREST SCIENTIFIC BULLETIN SERIES C-ELECTRICAL ENGINEERING
AND COMPUTER SCIENCE 81 (3) , pp.143-152*
4. *Title: Vector Fitting Based Adaptive Frequency Sampling for Compact Model Extraction
on HPC Systems Author(s): Ciuprina, Gabriela; Ioan, Daniel; Lazar, Ioan Alexandru; et
al. Source: Ieee Transactions on Magnetics Volume: 48 Issue: 2 Pages: 431-434
Published: FEB 2012 DOI: 10.1109/TMAG.2011.2174344 ISSN 0018-9464*
5. *Title: Kinematics and flow characteristics of a magnetic actuated multi-cilia configuration
Author(s): Isvoranu, Dragos; Ioan, Daniel; Parvu, Petrisor Source: Medical Engineering
& Physics Volume: 33 Issue: 7 Pages: 868-873 Published: SEP 2011 DOI:
10.1016/j.medengphy.2010.10.006 ISSN 0951-8320*
6. *Title: NUMERICAL MODELLING OF A CILIUM USING AN INTEGRAL EQUATION
Author(s): Rebican, Mihai; Ioan, Daniel Source: Revue Roumaine Des Sciences
Techniques-Serie Electrotechnique Et Energetique Volume: 56 Issue: 4 Pages: 359-366
Published: OCT-DEC 2011 ISSN 0035-406*
7. *Title: VARIABILITY MODELS FOR TRANSMISSION LINES Author(s): Stefanescu,
Alexandra Raluca; Ciuprina, Gabriela; Ioan, Daniel Source: Revue Roumaine Des
Sciences Techniques-Serie Electrotechnique Et Energetique Volume: 55 Issue: 4 Pages:
394-404 Published: OCT-DEC 2010 ISSN 0035-406 *
8. *Title: Effective Domain Partitioning With Electric and Magnetic Hooks Author(s): Ioan,
Daniel; Ciuprina, Gabriela; Silveira, Luis Miguel Source: Ieee Transactions on Magnetics
Volume: 45 Issue: 3 Pages: 1328-1331 Published: MAR 2009 Times Cited: 1 DOI:
10.1109/TMAG.2009.2012616 ISSN 0018-9464*
9. *Title: Nature-inspired microfluidic propulsion using magnetic actuation Author(s):
Khaderi, S. N.; Baltussen, M. G. H. M.; Anderson, P. D.; Ioan, D. et al. Source: Physical
Review E Volume: 79 Issue: 4 Published: APR 2009 Times Cited: 19 DOI:
10.1103/PhysRevE.79.046304 ISSN 1539-3755*
10. *Title: THE ELECTROMAGNETIC CIRCUIT ELEMENT - THE KEY OF MODELLING
ELECTROMAGNETICALLY COUPLED INTEGRATED COMPONENTS Author(s):
Ciuprina, Gabriela; Ioan, Daniel; Mihalache, Diana; et al. Source: Revue Roumaine Des
Sciences Techniques-Serie Electrotechnique Et Energetique Volume: 54 Issue: 1 Pages:
37-46 Published: JAN-MAR 2009 ISSN 0035-406*
11. *Title: Models for integrated components coupled with their EM environment Author(s):*

- Ioan, Daniel; Schilders, Wil; Ciuprina, Gabriela; et al. Source: Compel -the International Journal For Computation and Mathematics in Electrical and Electronic Engineering Volume: 27 Issue: 4 Pages: 820-829 Published: 2008 Times Cited: 7 DOI: 10.1108/03321640810878225 ISSN : 0332-1649.*
12. *Title: Parametric models based on the adjoint field technique for RF passive integrated components Author(s): Ioan, Daniel; Ciuprina, Gabriela; Schilders, W. H. A. Source: Ieee Transactions on Magnetics Volume: 44 Issue: 6 Pages: 1658-1661 Published: JUN 2008 Times Cited: 5 DOI: 10.1109/TMAG.2007.916368 ISSN 0018-9464*
 13. *Title: Reduced order electromagnetic models for on-chip passives based on dual finite integrals technique Author(s): Ciuprina, Gabriela; Ioan, Daniel; Milialache, Diana; et al. Source: SCEE06, Scientific Computing in Electrical Engineering 17-22 sep. 2006, Sinaia, Romania, Volume: 11 Pages: 287-+ Published: 2007 Springer ISBN 978-3-540-71979-3*
 14. *Title: Absorbing boundary conditions for compact modeling of on-chip passive structures Author(s): Ioan, Daniel; Ciuprina, Gabriela; Radulescu, Marius Source: Compel - the International Journal For Computation and Mathematics in Electrical and Electronic Engineering Volume: 25 Issue: 3 Pages: 652-659 Published: 2006 Times Cited: 3 DOI: 10.1108/03321640610666817 ISSN : 0332-1649.*
 15. *Title: Compact modeling and fast simulation of on-chip interconnect lines Author(s): Ioan, D; Ciuprina, G; Radulescu, M; et al. Source: Ieee Transactions on Magnetics Volume: 42 Issue: 4 Pages: 547-550 Published: APR 2006 Times Cited: 13 DOI: 10.1109/TMAG.2006.871466 ISSN 0018-9464*
 16. *Title: Eigenvalue computation by means of a tree-cotree filtering technique Author(s): Trapp, B; Munteanu, I; Schuhmann, R; Ioan, D. et al. Source: Ieee Transactions on Magnetics Volume: 38 Issue: 2 Pages: 445-448 Published: MAR 2002 Times Cited: 1 DOI: 10.1109/20.996118 ISSN 0018-9464*
 17. *Title: Numerical model for eddy-current testing of ferromagnetic steel parts Author(s): Ioan, D; Rebican, M Source: Ieee Transactions on Magnetics Volume: 38 Issue: 2 Pages: 629-632 Published: MAR 2002 Times Cited: 2 DOI: 10.1109/20.996164 ISSN 0018-9464*
 18. *Title: Reducing the complexity order of the algorithms for magnetic field nonlinear problems Author(s): Munteanu, I; Ciobotaru, C; Ioan, D Source: Compel -the International Journal For Computation and Mathematics in Electrical and Electronic Engineering Volume: 21 Issue: 2 Pages: 286-295 Published: 2002 DOI: 10.1108/03321640210416377 ISSN : 0332-1649.*
 19. *Title: Use of intelligent-particle swarm optimization in electromagnetics Author(s): Ciuprina, G; Ioan, D; Munteanu, I Source: Ieee Transactions on Magnetics Volume: 38 Issue: 2 Pages: 1037-1040 Published: MAR 2002 Times Cited: 94 DOI: 10.1109/20.996266 ISSN 0018-9464*
 20. *Title: Extraction of B-H relation based on the inverse magnetostatic problem Author(s): Ioan, D; Rebican, M Source: International Journal of Applied Electromagnetics and Mechanics Volume: 13 Issue: 1-4 Pages: 329-334 Published: 2001 ISSN: 1383-5416 Times Cited: 1*
 21. *Title: Magnetically induced currents in a three-dimensional human body model Author(s): Golovanov, C; Urma, D; Albu, M; Ioan, D. et al. Source: International Journal of Applied Electromagnetics and Mechanics Volume: 14 Issue: 1-4 Pages: 365-368 Published: 2001*

ISSN: 1383-5416

22. Title: *Triangle search method for nonlinear electromagnetic field computation* Author(s): Munteanu, I; Drobný, S; Weiland, T; Ioan, D. et al. Source: *Compel - the International Journal For Computation and Mathematics in Electrical and Electronic Engineering* Volume: 20 Issue: 2 Pages: 417-430 Published: 2001 Times Cited: 1 ISSN 0018-9464
23. Title: *Use of evolutionary agents to solve ENDE inverse problems* Author(s): Ioan, D; Rebican, M; Duca, A; et al. Source: *E'NDE 2000 - Electromagnetic Nondestructive Evaluation (V) June 2000, Budapest, Hungary, Volume: 21 Pages: 59-66 Published: 2001, IOS Press ISBN 1-58603-155-4*
24. Title: *FIT/PVL circuit-parameter extraction for general electromagnetic devices* Author(s): Munteanu, I; Wittig, T; Weiland, T; Ioan, D. et al. Source: *Ieee Transactions on Magnetics* Volume: 36 Issue: 4 Pages: 1421-1425 Published: JUL 2000 Times Cited: 6 ISSN 0018-9464
25. Title: *Hybrid and concurrent algorithms for nonlinear magnetic field problems* Author(s): Ioan, D; Ciuprina, G; Ciobotaru, C Source: *Ieee Transactions on Magnetics* Volume: 36 Issue: 4 Pages: 1553-1556 Published: JUL 2000 Times Cited: 1 ISSN 0018-9464
26. Title: *Identification of the B-H curve from external measurements using complementary formulations* Author(s): Albanese, R; Bossavit, A; Fresa, R; Ioan, D. et al. Source: *Physica B* Volume: 275 Issue: 1-3 Pages: 228-232 Published: JAN 2000 Times Cited: 2 DOI: 10.1016/S0921-4526(99)00763-2 ISSN 0921-4526
27. Title: *Models for capacitive effects in iron core transformers* Author(s): Ioan, D; Munteanu, I Source: *Ieee Transactions on Magnetics* Volume: 36 Issue: 4 Pages: 990-994 Published: JUL 2000 Times Cited: 2 DOI: 10.1109/20.877608 ISSN 0018-9464
28. Title: *B-H characteristic extraction using devices with non-uniform field* Author(s): Ioan, D; Rebican, M; Gasparics, A Source: *Compel - the International Journal For Computation and Mathematics in Electrical and Electronic Engineering* Volume: 18 Issue: 3 Pages: 469-481 Published: 1999 Times Cited: 3 DOI: 10.1108/03321649910275116 ISSN : 0332-1649
29. Title: *Capacitive effect models for a magnetic field sensor* Author(s): Ioan, D; Munteanu, I; Popeea, C Source: *Compel - the International Journal For Computation and Mathematics in Electrical and Electronic Engineering* Volume: 18 Issue: 3 Pages: 515-527 Published: 1999 Times Cited: 1 DOI: 10.1108/03321649910275206 ISSN : 0332-1649.
30. Title: *Embedded stochastic-deterministic optimization method with accuracy control* Author(s): Ioan, D; Ciuprina, G; Szigeti, A Source: *Ieee Transactions on Magnetics* Volume: 35 Issue: 3 Pages: 1702-1705 Published: MAY 1999 DOI: 10.1109/20.767353 ISSN 0018-9464
31. Title: *Parameter extraction for microwave devices based on 4SID techniques* Author(s): Munteanu, I; Ioan, D Source: *Ieee Transactions on Magnetics* Volume: 35 Issue: 3 Pages: 1781-1784 Published: MAY 1999 Times Cited: 2 DOI: 10.1109/20.767376 ISSN 0018-9464
32. Title: *Adjoint field technique applied in optimal design of a nonlinear inductor* Author(s): Ioan, D; Munteanu, I; Ciuprina, G Source: *Ieee Transactions on Magnetics* Volume: 34 Issue: 5 Pages: 2849-2852 Published: SEP 1998 Times Cited: 9 DOI: 10.1109/20.767376

10.1109/20.717663 ISSN 0018-9464

33. *Title: An object oriented data structure for field analysis Author(s): Popescu, M; Munteanu, I; Constantin, CG; Ioan, D. et al. Source: Ieee Transactions on Magnetics Volume: 34 Issue: 5 Pages: 3403-3406 Published: SEP 1998 Times Cited: 2 DOI: 10.1109/20.717801 ISSN 0018-9464*
34. *Title: Some properties of the non-homogeneous anisotropic Perfectly Matched Layer Author(s): Munteanu, I; Ioan, D Source: Ieee Transactions on Magnetics Volume: 34 Issue: 5 Pages: 2692-2695 Published: SEP 1998 DOI: 10.1109/20.717624 ISSN 0018-9464*
35. *53. Title: The best approximation of the field effects in electric circuit coupled problems Author(s): Ioan, D; Munteanu, I; Constantin, CG Source: Ieee Transactions on Magnetics Volume: 34 Issue: 5 Pages: 3210-3213 Published: SEP 1998*
36. *Title: Use of stochastic algorithms for distributed architectures in the optimization of electromagnetic devices Author(s): Ioan, D; Ciuprina, G; Dumitrescu, C Source: Ieee Transactions on Magnetics Volume: 34 Issue: 5 Pages: 3000-3003 Published: SEP 1998 Times Cited: 4 DOI: 10.1109/20.717701 ISSN 0018-9464*
37. *Title: Quasi-stationary magnetic field computation in hysteretic media Author(s): Ionita, V; Cranganu-Cretu, B; Ioan, D Source: Ieee Transactions on Magnetics Volume: 32 Issue: 3 Pages: 1128-1131 Published: MAY 1996 Times Cited: 9 DOI: 10.1109/20.497441 ISSN 0018-9464*

Baza IEEEExplore IEEE Transactions on Magnetics Impact factor 2.1

1. MEEC Models for RFIC Design Based on Coupled Electric and Magnetic Circuits Gabriela Ciuprina; Daniel Ioan; Rick Janssen; Edwin van der Heijden IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems Year: 2015 | Volume: 34, [Issue: 3](#) | Journal Article | Publisher: IEEE
2. Vector Fitting Based Adaptive Frequency Sampling for Compact Model Extraction on HPC Systems Gabriela Ciuprina; Daniel Ioan; Ioan Alexandru Lazar; Cosmin Bogdan Dita IEEE Transactions on Magnetics Year: 2012 | Volume: 48, Issue: 2 | Journal Article | Publisher: IEEE
3. Effective Domain Partitioning With Electric and Magnetic Hooks Daniel Ioan; Gabriela Ciuprina; Luis Miguel Silveira IEEE Transactions on Magnetics Year: 2009 | Volume: 45, Issue: 3 | Journal Article | Publisher: IEEE
4. Parametric Models Based on the Adjoint Field Technique for RF Passive Integrated Components Daniel Ioan; Gabriela Ciuprina; W. H. A. Schilders IEEE Transactions on Magnetics Year: 2008 | Volume: 44, Issue: 6 | Journal Article | Publisher: IEEE
5. Numerical model for eddy-current testing of ferromagnetic steel parts D. Ioan; M. Rebican IEEE Transactions on Magnetics Year: 2002 | Volume: 38, Issue: 2 |
6. Eigenvalue computation by means of a tree-cotree filtering technique B. Trapp; H. Munteanu; R. Schuhmann; T. Weiland; D. Ioan IEEE Transactions on Magnetics Year: 2002 | Volume: 38, Issue: 2 | Journal Article | Publisher: IEEE
7. Use of intelligent-particle swarm optimization in electromagnetics G. Ciuprina; D. Ioan; IEEE Transactions on Magnetics Year: 2002 | Volume: 38, Issue: 2 | Journal

Article | Publisher: IEEE Cited by: Papers (242)

8. Symbolic computation with Maple V for undergraduate electromagnetics I. Munteanu;D. Ioan IEEE Transactions on Education Year: 2001 | Volume: 44, Issue: 2
9. FIT/PVL circuit-parameter extraction for general electromagnetic devices I. Munteanu; T. Wittig;T. Weiland;D. Ioan IEEE Transactions on Magnetics Year: 2000 | Volume: 36, Issue: 4 | Journal Article | Publisher: IEEE
10. Hybrid and concurrent algorithms for nonlinear magnetic field problems D. Ioan; G. Giuprina; C. Ciobotaru IEEE Transactions on Magnetics Year: 2000 | Volume: 6, Issue: 4 | Journal Article | Publisher: IEEE
11. Models for capacitive effects in iron core transformers D. Ioan;I. Munteanu IEEE Transactions on Magnetics Year: 2000 | Volume: 36, Issue: 4 | Journal
12. Embedded stochastic-deterministic optimization method with accuracy control D. Ioan ;G. Ciuprina; A. Szigeti IEEE Transactions on Magnetics Year: 1999 | Volume: Parameter extraction for microwave devices based on 4SID techniques I. Munteanu;D. Ioan IEEE Transactions on Magnetics Year: 1999 | Volume: 35, Issue: 3 | Journal
13. Some properties of the non-homogeneous anisotropic perfectly matched layer I. Munteanu;D. Ioan IEEE Transactions on MagneticsYear: 1998 | Volume: 34, Issue: 5 | Journal Article | Publisher: IEEE
14. Adjoint field technique applied in optimal design of a nonlinear inductor D. Ioan;I. Munteanu;G. Ciuprina IEEE Transactions on Magnetics Year: 1998 | Volume: 34, Issue: 5 | Journal Article | Publisher: IEEE
15. An object oriented data structure for field analysis M. Popescu;I. Munteanu; C.-G. Constantin;D. Ioan IEEE Transactions on Magnetics Year: 1998 | Volume: 34, Issue: 5 | Journal Article | Publisher: IEEE
16. The best approximation of the field effects in electric circuit coupled problems D. Ioan;I. Munteanu;C.-G. Constantin IEEE Transactions on Magnetics Year: 1998 | Volume: 34, Issue: 5 | Journal Article | Publisher: IEEE
17. Use of stochastic algorithms for distributed architectures in the optimization of electromagnetic devices D. Ioan;G. Ciuprina;C. DumitrescuIEEE Transactions on Magnetics Year: 1998 | Volume: 34, Issue: 5 | Journal Article | Publisher: IEEE

Rio – Alte reviste de specialitate de circulație internațională.

1. Ciuprina, Gabriela, Jorge Fernández Villena, Daniel Ioan, Zoran Ilievski, Sebastian Kula, E. Jan W. ter Maten, Kasra Mohaghegh et al. "Parameterized model order reduction." In *Coupled Multiscale Simulation and Optimization in Nanoelectronics*, pp. 267-359. Springer, Berlin, Heidelberg, 2015.
2. Malureanu, Emilia-Simona, Mihail-Iulian Andrei, Daniel Ioan. "Numerical multiscale modeling of the metal-insulator-metal structures." *International Journal for Multiscale Computational Engineering* 13, no. 4 (2015).
3. Ciuprina, Gabriela, Aurel-Sorin Lup, Bogdan Diță, Daniel Ioan, Ștefan Sorohan, Dragoș Isvoranu, and Sebastian Kula. "Mixed Domain Macromodels for RF MEMS Capacitive Switches." In *Scientific Computing in Electrical Engineering*, pp. 31-39. Springer, Cham, 2016

4. Andrei, Mihail-Iulian, and Daniel Ioan. "Model Order Reduction of Integrated Inductors on HPC Systems." *Electrotehnica, Electronica, Automatica* 62, no. 2 (2014):
5. Munteanu, I.; Ciobotaru, C.; Ioan, D. Reducing the complexity order of the algorithms for magnetic field nonlinear problems COMPEL - The International Journal for Computation and Mathematics in Electrical and Electronic Engineering vol.21, no.2 : 286-95, 2002
6. Gabriela Ciuprina, Cosmin Bogdan Dita, Mihai Iulian Andrei, and Daniel Ioan: Hierarchical Sparse Circuits for the Modeling of Homogeneous Domains in High Frequency ICs *Chapter in POSDRU volume, pp.181-188, Politehnica Press, 2013.*
7. Munteanu, I.; Ioan, D. Symbolic computation with Maple V for undergraduate electromagnetics IEEE Transactions on Education vol.44, no.2 : 3 pp., May 2001
8. Vasiliu, B.; Ioan, D.; Munteanu, I. Distributed-architecture simulated annealing for optimization of electromagnetic devices Revue Roumaine des Sciences Techniques, Serie Electrotechnique et Energetique vol.43, no.3 : 409-16, July-Sept. 1998
9. Atanasiu, G.; Brad, P.; Ioan, D.; et al. Air gap magnetic permeance estimation for a switched reluctance motor Revue Roumaine des Sciences Techniques, Serie Electrotechnique et Energetique vol.43, no.3 :385-90, July-Sept. 1998
10. Ioan, D.; Ciuprina, G.; Szigeti, A. Embedded stochastic-deterministic optimization method with accuracy control Proceedings of the Eighth Biennial IEEE Conference on Electromagnetic Field Computation, 1-3 June 1998, Tucson, AZ, USA IEEE Transactions on Magnetics vol.35, no.3, pt.1 : 1702-5, May 1999
11. Ioan, D.; Ciureanu, S.A.; Gearba, A. The influence of the amorphous alloy magnetic properties on the air-gap dispersion field of the inductive magnetic heads *Electrotehnica, Electronica si Automatica* vol.46, no.7-8 : 30-3, July-Aug. 1998
12. Hantila, F.; Ioan, D. Voltage-current relation of circuit elements with field effects Revue Roumaine des Sciences Techniques, Serie Electrotechnique et Energetique vol.39, no.3 : 405-16, July-Sept. 1994
13. Hantila, F.I.; Ioan, D.C.; Peios, N.N.; Tegopoulos, J. Integral method for computation of eddy-current time constant Revue Roumaine des Sciences Techniques, Serie Electrotechnique et Energetique vol.39, no.1 :15-23, Jan.-March 1994
14. Morega, M.; Ioan, D. A Romanian experience in computer-aided electromagnetic education Applied Computational Electromagnetics Society Journal vol.8, no.1 : 125-37, 1993
15. Ioan, C.D.; Morega, A. Laboratory installation for the study of controlled solidification of metallic materials *Electrotehnica, Electronica si Automatica. Electrotehnica* vol.37, no.1 : 28-34, Jan. 1989
16. Notingher, P.; Ioan, C.D. A numerical method for computing the electrical stress in dielectrics Revue Roumaine des Sciences Techniques, Serie Electrotechnique et Energetique vol.23, no.3 : 363-72, July-Sept. 1978

Rns - Reviste de specialitate de circulație națională recunoscute de CNCSIS. Se mentioneaza Categoria CNCSIS.

Rno - Alte reviste de specialitate de circulație națională.

1. Dan, Daniel, Daniel Ioan, Simona Apostol, and Ionel Chirita. "Numerical Modeling and Theoretical Characterization of Experimental Procedures of Steerer Magnets for Particle Accelerators." *UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN-SERIES A-APPLIED MATHEMATICS AND PHYSICS* 78, no. 2 (2016): 255-266.

Vis- Volumele unor manifestări științifice internaționale recunoscute, organizate în țară și străinătate, indexate WOS sau indexate în alte 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 WOS [WOS Proceedings, Accession Number, WOS, ISSN] și/sau denumirea altei BDI.

1. Ciuprina, G.; Ioan, D.; Munteanu, I. Use of intelligent-particle swarm optimization in electromagnetics 13th Annual Conference on the Computation of Electromagnetic Fields (COMPUMAG '01), 2-5 July 2001, Evian, France IEEE Transactions on Magnetics vol.38, no.2, pt.1 : 1037-40, March 2002
2. Ioan, D.; Rebican, M. Numerical model for eddy-current testing of ferromagnetic steel parts 13th Annual Conference on the Computation of Electromagnetic Fields (COMPUMAG '01), 2-5 July 2001, Evian, France IEEE Transactions on Magnetics vol.38, no.2, pt.1 : 629-32, March 2002
3. Trapp, B.; Munteanu, H.; Schuhmann, R.; Ioan, D. Eigenvalue computation by means of a tree-cotree filtering technique 13th Annual Conference on the Computation of Electromagnetic Fields (COMPUMAG '01), 2-5 July 2001, Evian, France IEEE Transactions on Magnetics vol.38, no.2, pt.1 : 445-8, March 2002
4. Munteanu, I.; Drobny, S.; Weiland, T.; et al. Triangle search method for nonlinear electromagnetic field computation 9th International IGTE Symposium on Numerical Field Computation, Sept. 2000, Graz, Austria COMPEL - The International Journal for Computation and Mathematics in Electrical and Electronic Engineering vol.20, no.2 : 417-30, 2001
5. Ioan, D.; Ciuprina, G.; Ciobotaru, C. Hybrid and concurrent algorithms for nonlinear magnetic field problems 12th Conference of the Computation of Electromagnetic Fields (COMPUMAG '99), 25-28 Oct. 1999, Sapporo, Japan IEEE Transactions on Magnetics vol.36, no.4, pt.1 : 1553-6, July 2000
6. Munteanu, I.; Wittig, T.; Weiland, T.; et al. FIT/PVL circuit-parameter extraction for general electromagnetic devices 12th Conference of the Computation of Electromagnetic Fields (COMPUMAG '99), 25-28 Oct. 1999, Sapporo, Japan IEEE Transactions on Magnetics vol.36, no.4, pt.1 : 1421-5, July 2000
7. Ioan, D.; Munteanu, I. Models for capacitive effects in iron core transformers 12th Conference of the Computation of Electromagnetic Fields (COMPUMAG '99), 25-28 Oct. 1999, Sapporo, Japan IEEE Transactions on Magnetics vol.36, no.4, pt.1 : 990-4, July 2000
8. Ioan, D.; Munteanu, I.; Popeea, C. Capacitive effect models for a magnetic field sensor [for eddy current testing] 8th International IGTE Symposium on Numerical Field Calculation in Electrical Engineering, Sept. 1998, Graz, Austria COMPEL - The

International Journal for Computation and Mathematics in Electrical and Electronic Engineering vol.18, no.3 : 515-27, 1999

9. . Ioan, D.; Rebican, M.; Gasparics, A. B-H characteristic extraction using devices with non-uniform field 8th International IGTE Symposium on Numerical Field Calculation in Electrical Engineering, Sept. 1998, Graz, Austria COMPEL - The International Journal for Computation and Mathematics in Electrical and Electronic Engineering vol.18, no.3 : 469-81, 1999
10. Munteanu, I.; Ioan, D. Parameter extraction for microwave devices based on 4SID techniques Proceedings of the Eighth Biennial IEEE Conference on Electromagnetic Field Computation, 1-3 June 1998, Tucson, AZ, USA IEEE Transactions on Magnetics vol.35, no.3, pt.1 : 1781-4, May 1999
11. Ioan, D.; Ciuprina, G.; Szigeti, A. Embedded stochastic-deterministic optimization method with accuracy control Proceedings of the Eighth Biennial IEEE Conference on Electromagnetic Field Computation, 1-3 June 1998, Tucson, AZ, USA IEEE Transactions on Magnetics vol.35, no.3, pt.1 : 1702-5, May 1999
12. . Popescu, M.; Munteanu, I.; Constantin, C.-G.; Ioan, D.. An object oriented data structure for field analysis 11th International Conference on Computation of Electromagnetic Fields (COMPUMAG), 3-6 Nov. 1997, Rio de Janeiro, Brazil IEEE Transactions on Magnetics vol.34, no.5, pt.1 : 3403-6, Sept. 1998
13. Ioan, D.; Munteanu, I.; Constantin, C.-G. The best approximation of the field effects in electric circuit coupled problems 11th International Conference on Computation of Electromagnetic Fields (COMPUMAG), 3-6 Nov. 1997, Rio de Janeiro, Brazil IEEE Transactions on Magnetics vol.34, no.5, pt.1 : 3210-13, Sept. 1998
14. Ioan, D.; Ciuprina, G.; Dumitrescu, C. Use of stochastic algorithms for distributed architectures in the optimization of electromagnetic devices 11th International Conference on Computation of Electromagnetic Fields (COMPUMAG), 3-6 Nov. 1997, Rio de Janeiro, Brazil IEEE Transactions on Magnetics vol.34, no.5, pt.1 : 3000-3, Sept. 1998
15. Ioan, D.; Munteanu, I.; Ciuprina, G. Adjoint field technique applied in optimal design of a nonlinear inductor 11th International Conference on Computation of Electromagnetic Fields (COMPUMAG), 3-6 Nov. 1997, Rio de Janeiro, Brazil IEEE Transactions on Magnetics vol.34, no.5, pt.1 : 2849-52, Sept. 1998
16. Munteanu, I.; Ioan, D. Some properties of the non-homogeneous anisotropic perfectly matched layer 11th International Conference on Computation of Electromagnetic Fields (COMPUMAG), 3-6 Nov. 1997, Rio de Janeiro, Brazil IEEE Transactions on Magnetics vol.34, no.5, pt.1 : 2692-5, Sept. 1998
17. Dogaru, R.; Murgan, A.T.; Ioan, D. Chains of discrete-time chaotic neural networks for generation of broadband signals with applications in improved ciphering systems Proceedings of 8th Mediterranean Electrotechnical Conference on Industrial Applications in Power Systems, Computer Science and Telecommunications (MELECON 96), 13-16 May 1996, Bari, Italy MELECON '96. 8th Mediterranean Electrotechnical Conference. Industrial Applications in Power Systems, Computer Science and Telecommunications. Proceedings (Cat. No.96CH35884) : (vol.2) 635- 7, 1996

18. Ioan, D.; Sfetcu, M.B. New models of magnetic circuit elements for coupled problems Proceedings of Seventh Conference on Electromagnetic Field Computation - CEFEC, 18-20 March 1996, Okayama, Japan IEEE CEFC '96. The Seventh Biennial IEEE Conference on Electromagnetic Field Computation : 445, 1996
19. Hantila, F.; Gheorma, I.; Demeter, E.; Ioan, D. Electromagnetic circuit element: 3D FEM analysis Proceedings of Seventh Conference on Electromagnetic Field Computation - CEFEC, 18-20 March 1996, Okayama, Japan IEEE CEFC '96. The Seventh Biennial IEEE Conference on Electromagnetic Field Computation : 373, 1996 3
20. Ioan, D.; Hantila, F.; Gheorma, I. A study on the combined use of edge and nodal elements Proceedings of Seventh Conference on Electromagnetic Field Computation - CEFEC, 18-20 March 1996, Okayama, Japan IEEE CEFC '96. The Seventh Biennial IEEE Conference on Electromagnetic Field Computation : 177, 1996
21. Dogaru, R.; Murgan, A.T.; Ioan, D. Robust oscillations and bifurcations in cellular neural networks Proceedings of the Third IEEE International Workshop on Cellular Neural Networks and their Applications (CNNA-94), 18-21 Dec. 1994, Rome, Italy Proceedings of the Third IEEE International Workshop on Cellular Neural Networks and their Applications (CNNA-94) (Cat. No.94TH0693-2) : 303-8, 1994
22. . Beiu, V.; Ioan, D.C.; Dumbrava, M.C. Continuous Boltzmann machines: theoretical aspects and applications 4-8 May 1992, The Hague, Netherlands CompEuro 1992 Proceedings. Computer Systems and Software Engineering (Cat. No.91CH3121-1) : 193-8, 1992
23. Ioan, D.C.; Munteanu, I. Numerical methods in the electrical engineers education 3-6
24. Ioan, D.C. Equivalent circuits of solid iron core for transient problems 4-6 Sept. 1978, Grenoble, France Compumag Communications Proceedings : 10.5/1-7, 1978

Vi - Volumele unor manifestări științifice internaționale recunoscute, organizate în țară și străinătate;

1. Daniel Ioan. Lagrange Multipliers for Multi-physic Field-Circuit Coupling , Compumag, Kyoto, 2023
2. G Ciuprina, D Ioan, RV Sabariego Implementation and validation of the dual full-wave E and H formulations with electric circuit element boundary conditions International Conference on Scientific Computing in Electrical Engineering 2022
3. D Ioan, G Ciuprina BG Approximations of Multiphysics pH Distributed Systems with Finite Number of Ports International Conference on Scientific Computing in Electrical Engineering 2022
4. Ruxandra Barbulescu, Gabriela Ciuprina, Tudor Ionescu, Daniel Ioan, Luis Miguel Silveira Efficient model reduction of myelinated compartments as port-Hamiltonian systems Scientific Computing in Electrical Engineering: SCEE 2020, Eindhoven, The Netherlands, February 2020 pp 3-12 Springer International Publishing
5. Ciuprina, Gabriela, et al. "Electric circuit element boundary conditions in the finite element method for full-wave frequency domain passive devices." *Scientific Computing in Electrical Engineering: SCEE 2020, Eindhoven, The Netherlands, February 2020*. Cham: Springer International Publishing, 2021. 95-106.
6. Ciuprina, Gabriela, and Daniel Ioan. "Effective Modeling of Interconnects with Domain Partitioning and Model Order Reduction." *2021 IEEE 27th International Symposium for*

Design and Technology in Electronic Packaging (SIITME). IEEE, 2021.

7. A Duca, L Duca, G Ciuprina, D Ioan *Neighborhood strategies for QPSO algorithms to solve benchmark electromagnetic problems International Conference on Evolutionary Computation Theory and Applications ...2016*
8. Duca, Laurentiu, Daniel Ioan, and Anton Duca. "High performance computing techniques for fast solving a NDET forward problem." In *Numerical Electromagnetic and Multiphysics Modeling and Optimization for RF, Microwave, and Terahertz Applications (NEMO), 2017 IEEE MTT-S International Conference on*, pp. 115-118. IEEE, 2017.
9. Ioan, Daniel, Ruxandra Bărbulescu, Jean Ciurea, Gabriela Ciuprina, and Przemyslaw Syrek. "Simple hierarchical models of the Transcranial Magnetic Stimulation." In *Advanced Topics in Electrical Engineering (ATEE), 2017 10th International Symposium on*, pp. 398-403. IEEE, 2017.
10. Duca, Laurentiu-Cristian, Daniel Ioan, and Cornel Popescu. "Quantum-behaved PSO with neighborhood strategies for solving NDET inverse problems." In *Advanced Topics in Electrical Engineering (ATEE), 2017 10th International Symposium on*, pp. 823-827. IEEE, 2017.
11. Lup, Aurel Sorin, Gabriela Ciuprina, Daniel Ioan, Anton Duca, Alexandra Ștefănescu, Dan Vasilache, and Michael Kraft. "Parametric reduced order models in static multiphysics analysis of MEMS switches." In *Advanced Topics in Electrical Engineering (ATEE), 2017 10th International Symposium on*, pp. 513-518. IEEE, 2017.
12. Bărbulescu, Ruxandra, Daniel Ioan, and Jean Ciurea. "Simple 1D models for neuro-signals transmission along axons." In *Electrical and Power Engineering (EPE), 2016 International Conference and Exposition on*, pp. 313-319. IEEE, 2016.
13. Ciuprina, Gabriela, Daniel Ioan, Aurel-Sorin Lup, Mihai Popescu, Ruxandra Barbulescu, and Alexandra Stefanescu. "Coupled multiphysics-RF reduced models for MEMS." In *Power Electronics, Intelligent Control and Energy Systems (ICPEICES), IEEE International Conference on*, pp. 1-6. IEEE, 2016.
14. Duca, Anton, Laurentiu Duca, Gabriela Ciuprina, and Daniel Ioan. "SPSO Parallelization Strategies for Electromagnetic Applications." In *International Joint Conference on Computational Intelligence*, pp. 75-95. Springer, Cham, 2015
15. Duca, Anton, Laurentiu Duca, Gabriela Ciuprina, and Daniel Ioan. "GPGPU vs multiprocessor SPSO implementations to solve electromagnetic optimization problems." In *Computational Intelligence (IJCCI), 2015 7th International Joint Conference on*, vol. 1, pp. 64-73. IEEE, 2015.
16. Ciuprina, Gabriela, Cosmin-Bogdan Dita, Aurel-Sorin Lup, Daniel Ioan, and Alexandra Stefanescu. "Extraction of TL-lumped RF macromodels for MEMS switches." In *Numerical Electromagnetic and Multiphysics Modeling and Optimization (NEMO), 2015 IEEE MTT-S International Conference on*, pp. 1-4. IEEE, 2015.
17. Bărbulescu, Ruxandra, and Daniel Ioan. "Multi-scale and reduced modelling of biological systems." In *Advanced Topics in Electrical Engineering (ATEE), 2015 9th International Symposium on*, pp. 597-602. IEEE, 2015.
18. Diță, Cosmin-Bogdan, Aurel-Sorin Lup, Gabriela Ciuprina, and Daniel Ioan. "Compact TL-RLC-TL model extraction from FW field solution for RF MEMS capacitive switch." In *Advanced Topics in Electrical Engineering (ATEE), 2015 9th International Symposium on*, pp. 436-441. IEEE, 2015.

19. Popescu, Mihai, Aurel-Sorin Lup, Gabriela Ciuprina, and Daniel Ioan. "An object oriented data structure designed for multiphysics simulations on parallel computers." In *Advanced Topics in Electrical Engineering (ATEE), 2015 9th International Symposium on*, pp. 448-451. IEEE, 2015.
20. Bărbulescu, Ruxandra, Aurel-Sorin Lup, Gabriela Ciuprina, Daniel Ioan, and A. Egemen Yilmaz. "Intelligent Particle Swarm Optimization of Superconducting Magnetic Energy Storage devices." In *Fundamentals of Electrical Engineering (ISFEE), 2014 International Symposium on*, pp. 1-4. IEEE, 2014.
21. Ioan, Daniel, Gabriela Ciuprina, and W. H. A. Schilders. "Parasitic inductive coupling of integrated circuits with their environment." In *Electromagnetic Compatibility, Tokyo (EMC'14/Tokyo), 2014 International Symposium on*, pp. 565-568. IEEE, 2014.
22. Ciuprina, Gabriela, Daniel Ioan, and Mihail-Iulian Andrei. "Effective HF Modeling of Passive Devices Based on Frequency Dependent Hodge Operators and Model Order Reduction." In *PIERS Proceedings*. 2013.
23. Dan, Daniel, and Daniel Ioan. "Experimental characterization of electromagnets for particle accelerators." In *Advanced Topics in Electrical Engineering (ATEE), 2013 8th International Symposium on*, pp. 1-6. IEEE, 2013
24. Golovanov, C.; Urma, D.; Albu, M.; Ioan, D. Magnetically induced currents in a three-dimensional human body model Tenth International Symposium on Applied Electromagnetics and Mechanics. ISEM-Tokyo, 13-16 May 2001, Tokyo, Japan International Journal of Applied Electromagnetics and Mechanics vol.14, no.1-4 : 365-8, 2001-2002
25. Ioan, D.; Rebican, M. Extraction of B-H relation based on the inverse magnetostatic problem Tenth International Symposium on Applied Electromagnetics and Mechanics. ISEM-Tokyo, 13-16 May 2001, Tokyo, Japan International Journal of Applied Electromagnetics and Mechanics vol.13, no.1-4 : 329-34, 2001-2002
26. Duca, A.; Ioan, D. A hybrid transform-neural network approach for the inverse problem in NDET ISEM'99: Non-Linear Electromagnetic Systems, 10-12 May 1999, Pavia, Italy Non-Linear Electromagnetic Systems. ISEM '99 : 269-72, 2000
27. Pavo, J.; Ioan, D.; Novotny, P.; et al. Development of an innovative eddy current material evaluation technique ISEM'99: Non-Linear Electromagnetic Systems, 10-12 May 1999, Pavia, Italy Non-Linear Electromagnetic Systems. ISEM '99 : 249-52, 2000
28. Ciuprina, F.; Ciuprina, G.; Ioan, D. Error estimation in the numerical analysis of a nonlinear inductor Proceedings of International Aegean Conference on Electrical Machines and Power Electronics - ACEMP 2001, 27-29 June 2001, Kusadasi, Turkey Proceedings International Aegean Conference on Electrical Machines and Power Electronics : 613-16, 2001
29. Munteanu, I.; Ioan, D.; Ciobotaru, C. Numerical analysis of a die press model for ferrite micromachine poler using software agents Proceedings of International Aegean Conference on Electrical Machines and Power Electronics - ACEMP 2001, 27-29 June 2001, Kusadasi, Turkey Proceedings International Aegean Conference on Electrical Machines and Power Electronics : 607-12, 2001
30. 7Rebican, M.; Ioan, D. Extraction of B-H hysteresis loop from measurements with non-uniform magnetic field Proceedings of International Aegean Conference on

Electrical Machines and Power Electronics - ACEMP 2001, 27-29 June 2001, Kusadasi, Turkey Proceedings International Aegean Conference on Electrical Machines and Power Electronics : 283-7, 2001

31. Munteanu, I.; Ciobotaru, C.; Ioan, D. Reducing the complexity order of the algorithms for magnetic field nonlinear problems COMPEL - The International Journal for Computation and Mathematics in Electrical and Electronic Engineering vol.21, no.2 : 286-95, 2002
32. Ciuprina, G.; Ioan, D.; Munteanu, I. Use of intelligent-particle swarm optimization in electromagnetics 13th Annual Conference on the Computation of Electromagnetic Fields (COMPUMAG '01), 2-5 July 2001, Evian, France IEEE Transactions on Magnetics vol.38, no.2, pt.1 : 1037-40, March 2002
33. Ioan, D.; Rebican, M. Numerical model for eddy-current testing of ferromagnetic steel parts 13th Annual Conference on the Computation of Electromagnetic Fields (COMPUMAG '01), 2-5 July 2001, Evian, France IEEE Transactions on Magnetics vol.38, no.2, pt.1 : 629-32, March 2002
34. Trapp, B.; Munteanu, H.; Schuhmann, R.; Ioan, D. Eigenvalue computation by means of a tree-cotree filtering technique 13th Annual Conference on the Computation of Electromagnetic Fields (COMPUMAG '01), 2-5 July 2001, Evian, France IEEE Transactions on Magnetics vol.38, no.2, pt.1 : 445-8, March 2002
35. Munteanu, I.; Drobny, S.; Weiland, T.; et al. Triangle search method for nonlinear electromagnetic field computation 9th International IGTE Symposium on Numerical Field Computation, Sept. 2000, Graz, Austria COMPEL - The International Journal for Computation and Mathematics in Electrical and Electronic Engineering vol.20, no.2 : 417-30, 2001
36. 14. Munteanu, I.; Ciobotaru, C.; Ioan, D. Reducing the complexity order of the algorithms for magnetic field nonlinear problems 16th Symposium Electromagnetic Phenomena in Nonlinear Circuits, 18-20 Sept. 2000, Krakow, Poland 16th Symposium Electromagnetic Phenomena in Nonlinear Circuits. Proceedings EPNC 2000 : 65-8, 2000
37. 15. Ioan, D.; Ciuprina, G.; Ciobotaru, C. Hybrid and concurrent algorithms for nonlinear magnetic field problems 12th Conference of the Computation of Electromagnetic Fields (COMPUMAG '99), 25-28 Oct. 1999, Sapporo, Japan IEEE Transactions on Magnetics vol.36, no.4, pt.1 : 1553-6, July 2000
38. . Munteanu, I.; Wittig, T.; Weiland, T.; et al. FIT/PVL circuit-parameter extraction for general electromagnetic devices 12th Conference of the Computation of Electromagnetic Fields (COMPUMAG '99), 25-28 Oct. 1999, Sapporo, Japan IEEE Transactions on Magnetics vol.36, no.4, pt.1 : 1421-5, July 2000
39. Ioan, D.; Munteanu, I. Models for capacitive effects in iron core transformers 12th Conference of the Computation of Electromagnetic Fields (COMPUMAG '99), 25-28 Oct. 1999, Sapporo, Japan IEEE Transactions on Magnetics vol.36, no.4, pt.1 : 990-4, July 2000
40. Vasiliu, B.; Ioan, D.; Munteanu, I. Distributed-architecture simulated annealing for optimization of electromagnetic devices Revue Roumaine des Sciences Techniques, Serie Electrotechnique et Energetique vol.43, no.3 : 409-16, July-Sept. 1998

41. Atanasiu, G.; Brad, P.; Ioan, D.; et al. Air gap magnetic permeance estimation for a switched reluctance motor *Revue Roumaine des Sciences Techniques, Serie Electrotechnique et Energetique* vol.43, no.3 :385-90, July-Sept. 1998
42. Albanese, R.; Bossavit, A.; Fresa, R.; et al. Identification of the B-H curve from external measurements using complementary formulations *Second International Symposium on Hysteresis Modeling and Micromagnets. HMM'99*, 7-9 June 1999, Perugia, Italy *Physica B* vol.275, no.1-3 : 228-32, Jan. 2000
43. Ioan, D.; Munteanu, I.; Popeea, C. Capacitive effect models for a magnetic field sensor [for eddy current testing] *8th International IGTE Symposium on Numerical Field Calculation in Electrical Engineering*, Sept. 1998, Graz, Austria *COMPEL - The International Journal for Computation and Mathematics in Electrical and Electronic Engineering* vol.18, no.3 : 515-27, 1999
44. Ioan, D.; Rebican, M.; Gasparics, A. B-H characteristic extraction using devices with non-uniform field *8th International IGTE Symposium on Numerical Field Calculation in Electrical Engineering*, Sept. 1998, Graz, Austria *COMPEL - The International Journal for Computation and Mathematics in Electrical and Electronic Engineering* vol.18, no.3 : 469-81, 1999
45. . Munteanu, I.; Ioan, D. Parameter extraction for microwave devices based on 4SID techniques *Proceedings of the Eighth Biennial IEEE Conference on Electromagnetic Field Computation*, 1-3 June 1998, Tucson, AZ, USA *IEEE Transactions on Magnetics* vol.35, no.3, pt.1 : 1781-4, May 1999
46. Ioan, D.; Ciuprina, G.; Szigeti, A. Embedded stochastic-deterministic optimization method with accuracy control *Proceedings of the Eighth Biennial IEEE Conference on Electromagnetic Field Computation*, 1-3 June 1998, Tucson, AZ, USA *IEEE Transactions on Magnetics* vol.35, no.3, pt.1 : 1702-5, May 1999
47. Ioan, D.; Ciureanu, S.A.; Gearba, A. The influence of the amorphous alloy magnetic properties on the air-gap dispersion field of the inductive magnetic heads *Electrotehnica, Electronica si Automatica* vol.46, no.7-8 : 30-3, July-Aug. 1998
48. Popescu, M.; Munteanu, I.; Constantin, C.-G.; Ioan, D.. An object oriented data structure for field analysis *11th International Conference on Computation of Electromagnetic Fields (COMPUMAG)*, 3-6 Nov. 1997, Rio de Janeiro, Brazil *IEEE Transactions on Magnetics* vol.34, no.5, pt.1 : 3403-6, Sept. 1998
49. Ioan, D.; Munteanu, I.; Constantin, C.-G. The best approximation of the field effects in electric circuit coupled problems *11th International Conference on Computation of Electromagnetic Fields (COMPUMAG)*, 3-6 Nov. 1997, Rio de Janeiro, Brazil *IEEE Transactions on Magnetics* vol.34, no.5, pt.1 : 3210-13, Sept. 1998
50. . Ioan, D.; Ciuprina, G.; Dumitrescu, C. Use of stochastic algorithms for distributed architectures in the optimization of electromagnetic devices *11th International Conference on Computation of Electromagnetic Fields (COMPUMAG)*, 3-6 Nov. 1997, Rio de Janeiro, Brazil *IEEE Transactions on Magnetics* vol.34, no.5, pt.1 : 3000-3, Sept. 1998
51. . Ioan, D.; Munteanu, I.; Ciuprina, G. Adjoint field technique applied in optimal design of a nonlinear inductor *11th International Conference on Computation of Electromagnetic Fields (COMPUMAG)*, 3-6 Nov. 1997, Rio de Janeiro, Brazil *IEEE*

- Transactions on Magnetism vol.34, no.5, pt.1 : 2849-52, Sept. 1998
52. Munteanu, I.; Ioan, D. Some properties of the non-homogeneous anisotropic perfectly matched layer 11th International Conference on Computation of Electromagnetic Fields (COMPUMAG), 3-6 Nov. 1997, Rio de Janeiro, Brazil IEEE Transactions on Magnetism vol.34, no.5, pt.1 : 2692-5, Sept. 1998
 53. Dogaru, R.; Murgan, A.T.; Ioan, D. Chains of discrete-time chaotic neural networks for generation of broadband signals with applications in improved ciphering systems Proceedings of 8th Mediterranean Electrotechnical Conference on Industrial Applications in Power Systems, Computer Science and Telecommunications (MELECON 96), 13-16 May 1996, Bari, Italy MELECON '96. 8th Mediterranean Electrotechnical Conference. Industrial Applications in Power Systems, Computer Science and Telecommunications. Proceedings (Cat. No.96CH35884) : (vol.2) 635- 7, 1996
 54. Ioan, D.; Sfetcu, M.B. New models of magnetic circuit elements for coupled problems Proceedings of Seventh Conference on Electromagnetic Field Computation - CEFEC, 18-20 March 1996, Okayama, Japan IEEE CEFC '96. The Seventh Biennial IEEE Conference on Electromagnetic Field Computation : 445, 1996
 55. 33. Hantila, F.; Gheorma, I.; Demeter, E.; Ioan, D. Electromagnetic circuit element: 3D FEM analysis Proceedings of Seventh Conference on Electromagnetic Field Computation - CEFEC, 18-20 March 1996, Okayama, Japan IEEE CEFC '96. The Seventh Biennial IEEE Conference on Electromagnetic Field Computation : 373, 1996 3
 56. 4. Ioan, D.; Hantila, F.; Gheorma, I. A study on the combined use of edge and nodal elements Proceedings of Seventh Conference on Electromagnetic Field Computation - CEFEC, 18-20 March 1996, Okayama, Japan IEEE CEFC '96. The Seventh Biennial IEEE Conference on Electromagnetic Field Computation : 177, 1996
 57. Hantila, F.; Ioan, D. Voltage-current relation of circuit elements with field effects Revue Roumaine des Sciences Techniques, Serie Electrotechnique et Energetique vol.39, no.3 : 405-16, July-Sept. 1994
 58. Hantila, F.I.; Ioan, D.C.; Peios, N.N.; Tegopoulos, J. Integral method for computation of eddy-current time constant Revue Roumaine des Sciences Techniques, Serie Electrotechnique et Energetique vol.39, no.1 :15-23, Jan.-March 1994
 59. Dogaru, R.; Murgan, A.T.; Ioan, D. Robust oscillations and bifurcations in cellular neural networks Proceedings of the Third IEEE International Workshop on Cellular Neural Networks and their Applications (CNNA-94), 18-21 Dec. 1994, Rome, Italy Proceedings of the Third IEEE International Workshop on Cellular Neural Networks and their Applications (CNNA-94) (Cat. No.94TH0693-2) : 303-8, 1994
 60. Hantila, F.I.; Ioan, D.C. Integral method for finding the time constants in electromagnetic time diffusion Revue Roumaine des Sciences Techniques, Serie Electrotechnique et Energetique vol.38, no.1 : 71-80, Jan.-March 199
 61. Morega, M.; Ioan, D. A Romanian experience in computer-aided electromagnetic education Applied Computational Electromagnetics Society Journal vol.8, no.1 : 125-37, 1993
 62. Beiu, V.; Ioan, D.C.; Dumbrava, M.C. Continuous Boltzmann machines: theoretical

aspects and applications 4-8 May 1992, The Hague, Netherlands CompEuro 1992 Proceedings. Computer Systems and Software Engineering (Cat. No.91CH3121-1) : 193-8, 1992

63. Ioan, D.C.; Munteanu, I. Numerical methods in the electrical engineer's education International Conference on Computer Aided Engineering. CAEE '91, 3-6 Sept. 1991, Prague, Czechoslovakia European Journal of Engineering Education vol.17, no.2 : 151-7, 1992
64. Beiu, V.; Ioan, D.C.; Dumbrava, M.C.; et al. Physical fields determination using continuous Boltzmann machines 10-12 Feb. 1992, Innsbruck, Austria Proceedings of the Tenth IASTED International Conference. Applied Informatics : 284-7, 1992
65. Ioan, D.C.; Munteanu, I. Numerical methods in the electrical engineers education 3-6 Sept. 1991, Prague, Czechoslovakia International Conference on Computer Aided Engineering Education. CAEE '91. Proceedings of the Czech Technical University of Prague : 88-96, 1991
66. . Ioan, D.C. Equivalent circuits of solid iron core for transient problems 4-6 Sept. 1978, Grenoble, France Compumag Communications Proceedings : 10.5/1-7, 1978
67. Ioan, C.D.; Morega, A. Laboratory installation for the study of controlled solidification of metallic materials Electrotehnica, Electronica si Automatica. Electrotehnica vol.37, no.1 : 28-34, Jan. 1989
68. Notingher, P.; Ioan, C.D. A numerical method for computing the electrical stress in dielectrics Revue Roumaine des Sciences Techniques, Serie Electrotechnique et Energetique vol.23, no.3 : 363-72, July-Sept. 1978

Vn - Volumele unor manifestări științifice naționale.

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

B - Brevete de invenție.

A - Inovații sau creații artistice.

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 - internationale).

1. Daniel Ioan coordonator echipe România, Proiect COST European Model Reduction Network - MORNET 1531, 2014-2018, Buget 226 000 Eur
2. Daniel Ioan co-ordinator participant, ToMeMS Advanced Tools and Methodologies for the Multiphysics Modelling and Simulation of RF MEMS Switches Duration: 2012 – 2016 Budget: 1,710,000 lei (UPB: 890,000 lei, IMT: 820,000 lei)
3. Daniel Ioan - PUB team coordinator - Compact modeling of on-chip passive structures at high frequencies (CODESTAR), FP5-IST, Area: Microelectronics technologies: processes, equipment and devices, Contract no:34058, 2002-2004, Budget PUB: 224 222 Euro.
4. Daniel Ioan - PUB coordinator - Comprehensive High-Accuracy Modelling of Electromagnetic Effects in Complete Nanoscale RF Blocks (CHAMELEON RF), FP6-

IST, Area: Nanoelectronics, Contract no: 027378, 2005-2008, Budget PUB: 247 800 Euro.

5. Daniel Ioan - Project initiator and coordinator - Early Stage research Training at an EaSTern European Site with Tradition (EST3), FP6-MOBILITY, Area: Marie Curie Host Fellowships - Early stage research training (EST), Contract no: 20552, 2005-2009, <http://est3.lmn.pub.ro/> Budget PUB: 744 000 Euro.
6. Daniel Ioan - PUB team coordinator - Coupled Multiscale Simulation and Optimization in Nanoelectronics (COMSON), FP6-Mobility, Area: Marie Curie Research Training Networks (RTN), Contract no: 019417, 2005-2010, PUB Budget: 233 000 Euro,
7. Daniel Ioan - project initiator and coordinator - High Performance Computing Knowledge for nano-Electronic Design Automation (ToK4nEDA), FP6- MOBILITY Area:Marie Curie Host Fellowships - Transfer of knowledge (TOK), Contract no: 042603, <http://tok.lmn.pub.ro/>, 2006-10, PUB Budget: 351451 Euro,
8. Daniel Ioan - PUB team coordinator - Nature-inspired micro-fluidic manipulation using artificial cilia (ARCTIC), FP6-NMP, Area:Nanotechnology and nanoscience, Contract no: 033274, 2006-2010, PUB Budget: 181 200 Euro, Scientific objectives:
9. Daniel Ioan - Initiator si director de proiect - Metodologii si instrumente pentru proiectarea nano-electronica automata - nEDA, CEEEX – Modul I, nr 03 / 06.10.2005, <http://neda.lmn.pub.ro/>, 2005-2008, Buget: 1 557 631 lei,
10. Daniel Ioan - PUB team coordinator - Novel nondestructive material testing technique based on a new magnetic field measurement principle (MANODET), FP5/Copernicus, No. ERBIC15CT960703, 1997-2000, Buget: 100 000ECU,
11. Daniel Ioan - Co-qutorsi partner - Dezvoltarea calculului de inalta performanta in Romania, (CoLaborator), Banca Mondiala/CNCSU/BCUM, 1998-2000, Buget: 1 000 000USD
12. Daniel Ioan - Co-initiator and contractor - Audiovisual Communication based on Information Technologies (ACIT), TEMPUS JEP 2912, 1995-1998, Buget: 550 000 ECU,
13. Daniel Ioan - Initiator and cordinator - Initiation of Formal Training in CAEE in Romanian Universities. (PSCAEE), TEMPUS, No JEP/JEN 2717., 1991-1995, Buget: 650 000 ECU
14. D. Ioan - project initiator and coordinator- Extention of Eurochip Services to Central and Eastern European Countries, EUROEAST - INCO-COPERNICUS CP - 939093/ 1995
15. D. Ioan - project initiator and coordinator - International Conference on Computer Aided Engineering Education - CAEE'93, PECO'92 (LOST) Action no. 3227- Budget 20 000ECU.