Prof. Ioan Florea HĂNŢILĂ

LISTA DE LUCRARI SI DE CITARI
(2001-2013)

- ***56 Lucrari publicate in reviste, dintre care***
  - ***38 in reviste cotate ISI***
  - ***11 in Rev. Roum. Sci. Techn. - Électrotechn. et Énerg.,***
- ***62 Lucrari publicate in volumele unor manifestari stiintifice internationale***
- ***59 Lucrari publicate in volumele unor manifestari stiintifice nationale***
- ***12 cărţi***

TOTAL 189

CITARI 168

Prof. Ioan Florea HĂNŢILĂ

LIST OF SCIENTIFIC PAPERS AND CITATIONS (2001-2013)

A) Scientific papers published in journals

A.1 T.Maghiar, O.Drosu, T.Leuca, M.Silaghi, St.Nagy, F.Hantila, "FEM Formulation for Electromagnetic Field Computation in Microwave Oven ", *Analele Universităţii din Oradea, fascicola Electrotehnică,* 2001, p.95-99,

A.2 T.Maghiar, St.Nagy, T.Leuca, F.Hantila, "Numerical Analysis of Melting Process in Casting Installation with Controlled Phase Transformation", *Analele Universităţii din Oradea, fascicola Electrotehnică*, 2001, p.100-103,

A.3 P.Pencioiu, O.Drosu, V.Turcin, N.Vasile, F.Hantila, "BEM Analysis of the Electromagnetic Field in Oven Cavity ", *Analele Universităţii din Oradea, fascicola Electrotehnică*, 2001, p.118-123,

A.4 E.Demeter, V.Nitigus, I.Costea-Marcu, M.Stanculescu, F.Hantila, "Solutions for a Small 300 Hz Synchronous Generator ", *Analele Universităţii din Oradea, fascicola Electrotehnică*, 2001, p.339-350,

A.5 M.Stanculescu, C.Tugulea, F.Hantila, "New Relation for Magnetic Force Computation ", *Analele Universităţii din Oradea, fascicola Electrotehnică,* 2001, p.438-443,

A.6 Cranganu-Cretu B, Mihalache O, Preda G, F.Hantila, K.Miya, "2D and 3D simulations of MFL signals for non-linear magnetic materials", *Applied Electromagnetics III* JSAEM Studies in Applied Electromagnetics and Mechanics, 10 (Proceedings of The 3rd Asian Symposium on Applied Electromagnetics, May 28-30,2001, Hangzhou, China, p.37-40) **(ISI)**;

A.7 Preda G, Cranganu-Cretu B, Mihalache O, F.Hantila, K.Miya, "Fast procedure for crack reconstruction in Nonlinear materials using FEM-BEM with polarization method and neural. networks", *Applied Electromagnetics III* , JSAEM Studies in Applied Electromagnetics and Mechanics, 10 (Proceedings of The 3rd Asian Symposium on Applied Electromagnetics, May 28-30,2001, Hangzhou, China, p.301-304) **(ISI)**;

A.8 F. Hantila, M.Vasiliu, G.Preda, E.Demeter, "Sensitivities for a Synchronous Generator", *International Journal of Applied Electromagnetics and Mechanics* **(ISI)**, vol.13, Nos.1-4, 2001/2002, p.189-194,

A.9 M.Vasiliu, A.Moraru, F.Hantila, "Minimizing Winding Losses under Trapezoidal Current Waveforms", *International Journal of Applied Electromagnetics and Mechanics* **(ISI)**, vol.13, Nos.1-4, 2001/2002, p.405-410,

A.10 F. Hantila, B.Cranganu-Cretu, G.Preda, K.Miya, "Force Evaluation Formula for Integral Methods of Magnetic Field Computation", *International Journal of Applied Electromagnetics and Mechanics* **(ISI)**, vol.14, Nos.1-4, 2001/2002, p.3-8,

A.11 B.Cranganu-Cretu, F.Hantila, G.Preda, Z.Chen, K.Miya, "Direct computation of static difference magnetic field in nonlinear magnetic materials and application to shape reconstruction of damaged areas in aging materials", *IEEE Transaction on Magnetics* **(ISI)**, no.2, vol.38, 2002, p.1073-1076,

A.12 G.Preda, B.Cranganu-Cretu, O.Mihalache, F.Hantila, Z.Chen and K.Miya, "Nonlinear FEM-BEM Formulation and Model-Free Inversion Procedure for Reconstruction of Cracks Using Pulse Eddy Currents", *IEEE Transaction on Magnetics* **(ISI)**, no.2, vol.38, 2002, p.1241-1244,

A.13 H. Gavrila, Fl. Hantila, M. Maricaru, M. Vasiliu, "Treatment of the Multiply Connected Domains in Numerical Analysis of Magnetic Boundary Value Problems", ***Rev. Roum. Sci. Techn. Ser. Electrotechnique et Energ****., Ed. Academiei Romane*, ISSN 0035-4066, tome 48, 2003, pp. 167-177.

A.14 C. Mihai, F.Hantila, F.Hantila Jr., St.Nagy, S.Marius, "Some aspects of thermic non-destructive testing", *Analele Universităţii din Oradea, fascicola Electrotehnică,* 2003, p.56-59,

A.15 T.Maghiar, H.Gavrila, F.Hantila, M.Vasiliu, "Error Evaluation for Numerical Solving of Nonlinear Magnetic Field Using Green Function Method", *Analele Universităţii din Oradea, fascicola Electrotehnică,* 2003, p.185-188,

A.16 F.Hantila, I.R.Ciric, "Magnetic Vector Potential Tree Edge Values for Boundary Elements", *IEEE Transaction on Magnetics* **(ISI)**, no.3, vol.39, 2003, p.1183-1186,

A.17 I.R.Ciric, T.Maghiar, F.Hantila , C.Ifrim, "Error bounds for the FEM numerical solution of nonlinear field problems", *COMPEL* **(ISI)**, vol.23, no.3, 2004, p.835-844, (**lucrarea a luat premiul "The high commended paper", al revistei COMPEL pe anul 2004**)

A.18 F. Hantila, M. Vasiliu, M. Maricaru, A. Della Giacomo, Boundary Element Method for Multiply Connected Domains , *Journal of Materials Processing Technology* **(ISI)**, ISSN : 0924-0136, vol.161, 2005, p.315-319,

A.19 B. Cranganu-Cretu, F.Hantila and T.Leuca, Microwave Ovens Electromagnetic Field Analysis by Means of Boundary Element Method , *Journal of Materials Processing Technology* **(ISI)**, ISSN : 0924-0136, vol.161, 2005, p.303-3906,

A.20 F.Hantila, M.Vasiliu, I.Gheorma, "Numerical aspects for electromagnetic field problems with circuit boundary conditions", ***Roum. Sci. Techn. Ser. Electrotechnique et Energ.*,** ISSN 0035-4066, vol 49, no.4, 2004, p.579-592,

A.21 F. Hantila, C.Mihai, C.Ifrim, and T.Leuca, "A New Procedure for Reconstruct the Aged Regions of the Ferromagnetic Bodies", *COMPEL* **(ISI)**, vol.24, no.2, 2005, p.620-627,

A.22 F.Hantila, M.Marinescu, M.Maricaru, "Thermal Stability of he PM Synchronous Generator Voltage", ***Roum. Sci. Techn. Ser. Electrotechnique et Energ.***, vol. 50, no.2, 2005, p.179-189,

A.23 P.Pencioiu, V.Turcin, A,Anghel, M.Maricaru, F.Hantila, „Electromagnetic heating for hardening", ***Rev.Roum.Sci.Techn. – Electrotechn. et Energ***., nr.2, 2006, p.183-190,

A.24 F.Hantila, M.Maricaru, Cl.Popescu, C.Ifrim, St.Ganatsios, "Performances of a Waste Recycling Separator with Permanent Magnets", in *Journal of Materials Processing Technology,* **(ISI)**, ISSN 0035-4066, Volume 181, Issues 1-3 , 1 January 2007, Pages 246-248,

A.25 I.Ciric, F.Hantila, "An Efficient Harmonic Method for Solving Nonlinear Time-Periodic Eddy-Current Problems", *IEEE Transaction on Magnetics* **(ISI)**, no.4, vol.43, 2007, pp.1185-1188,

A.26 F. I. Hantila, M. Maricaru, O. Drosu, S. Marinescu, "Eddy-Current Melting of Ferromagnetic Bodies", *Journal of Optoelectronics and Advanced Materials* **(ISI)**, ISSN 1454 – 4164, Vol. 10, No. 5, May 2008, pp. 1208 – 1212,

A.27 F. Hantila, O. Drosu, M. Maricaru, "Breast tumour detection using the numerical analysis of the thermal inverse problem", *Journal of Optoelectronics and Advanced Materials* **(ISI)**, ISSN 1454 – 4164, Vol. 10, No. 5, May 2008, pp. 1295 – 1298,

A.28 Ciric, I.R. Hantila, F.I. Maricaru, M., "Novel Solution to Eddy-Current Heating of Ferromagnetic Bodies With Nonlinear B-H Characteristic Dependent on Temperature", *IEEE Trans. on Magn.*, **(ISI)** ISSN 0018-9464, Vol. 44, No. 6, Jun. 2008, pp. 1190-1193,

A.29 G.Preda, F.Hantila, „Integral FEM eddy current solver for non-destructiv testing", ***Revue Roum. Sci. Techn. Ser. Electrotechnique et Energ***., **(ISI)**, no.3, 2008, p.279-284,

A.30 M.-N. Arion, T. Leuca, F. I. Hantila, "Numerical analysis method for solving the coupled electromagnetic and thermal field questions for induction heating systems with moving parts", *Journal of Optoelectronics and Advanced Materials* **(ISI)**, ISSN 1454 – 4164, Vol. 10, No. 5, May 2008, pp. 1213 - 1217.

A.31 F. I. Hantila, F. Constantinescu, A. G. Gheorghe, M. Nitescu, M. Maricaru, "A new algorithm for frequency domain analysis of nonlinear circuit", ***Revue Roum. Sci. Techn. Ser. Electrotechnique et Energ***., **(ISI)**, no.1, 2009, p. 57-66,

A.32 I. R. Ciric, F. I. Hantila, M. Maricaru, S. Marinescu, "Efficient Analysis of the Solidification of Moving Ferromagnetic Bodies With Eddy-Current Control", ***IEEE Trans. on Magn***. **(ISI),** ISSN 0018-9464, Vol. 45, No. 3, March 2009, p. 1238-1241,

A.33 F. I. Hantila, I. R. Ciric, A. Moraru, M. Maricaru, "Modelling eddy currents in thin shields", ***COMPEL: The International Journal for Computation and Mathematics in Electrical and Electronic Engineering*** **(ISI)**, ISSN: 0332-1649, vol.28, no.4, 2009, p. 963-972.

A.34 Gabriel Cheregi, Florea Ioan Hantila, Lucian Ocheana, Mircea Arion, Gabriel Barbu, „Qualitative aspects of the quasistationary electromagnetic field", *Journal of Electrical and Electronics Engineering,* ISSN 1844-6035 (categ. B+ 2009), Vol. 2, Nr. 1, 2009, pp. 18-21.

A.35 Ioan Florea Hantila, Iosif Nemoianu, Mihai Maricaru, Ioana Hantila, Paula Palade, „An iterative procedure for solving FEM-BEM equations", *Journal of Electrical and Electronics Engineering, ISSN 1844-6035* (categ. B+ 2009), Vol. 2, Nr. 1, 2009, pp. 52-55.

A.36 Iosif Nemoianu, Florea Ioan Hantila, Mihai Maricaru, Dan Rucinschi, Teodor Leuca, „A method for solving the time-periodic electromagnetic field problem in ferromagnetic shielding", *Journal of Electrical and Electronics Engineering*, ISSN 1844-6035 (categ. B+ 2009), Vol. 2, Nr. 1, 2009, pp. 83-86.

A.37 O. Drosu, F.Hantila, M. Maricaru, "Non-invasive method for screening and early detection of breast tumors using thermal field analysis", *Journal of Electrical and Electronics Engineering*, ISSN

1844-6035 (categ. B+ 2009), Vol. 2, Nr. 2, 2009, pp. 21-24. (BDI: http://www.doaj.org/ - Directory of Open Access Journals).

A.38 Ioan R. Ciric, Florea I. Hantila, Augustin Moraru, Mihai Maricaru, "Performance analysis of multiply connected thin shields", *International Journal of Applied Electromagnetics and Mechanics* **(ISI)**, ISSN 1383-5416, Vol. 33, no. 1-2, 2010, pp. 271-278.

A.39 Gabriel Preda, Mihai Rebican, Florea Ioan Hantila, " Pulse eddy currents using an integral-FEM formulation for cracks detection", *International Journal of Applied Electromagnetics and Mechanics* **(ISI)**, ISSN 1383-5416, Vol. 33, no. 3-4, 2010, pp. 1225-1229.

A.40 Ioan R. Ciric, Florea I. Hantila, Mihai Maricaru, "Field Analysis for Thin Shields in the Presence of Ferromagnetic Bodies" , *IEEE Transactions on Magnetics* **(ISI)**, ISSN 0018-9464, Vol. 46, No. 8, 2010, pp. 3373-3376.

A.41 G. Preda, M. Rebican, F.I. Hantila, "Integral Formulation and Genetic Algorithms for Defects Geometry Reconstruction Using Pulse Eddy Currents," *IEEE Transactions on Magnetics* **(ISI)**, ISSN 0018-9464, vol.46, no.8, Aug. 2010, pp. 3433-3436.

A.42 Ioan Florea Hănţilă, Mihai Vasiliu, Augustin Moraru, Mihai Maricaru, "Utilizing the polarization method for solving a nonlinear magnetic shielding problem", ***Rev. Roum. Sci. Techn, serie Electrotechn. et Energ*.(ISI)**, ISSN: 0035-4066, Vol. 55, No.2, 2010, pp. 123-131.

A.43 Ilie Stoichescu, Marilena Stanculescu, Teodor Leuca, Ioan Florea Hantila, Paula Alexandra Palade, Lucian Ocheana, "FEM-BEM Electrical Field Analysis in Radiofrequency Heating", *Journal of Electrical and Electronics Engineering*, ISSN 1844-6035 (BDI: DOAJ, Copernicus, Ulrich's, JorunalSeek, INTUTE, EBSCO), Vol. 3, No. 1, 2010, pp. 213-218.

A.44 Oana Drosu, Ioana Hantila, Valeriu Turcin, Paul Pencioiu, Paula Palade, Mihai Maricaru, Florea Hantila, "Electrostatic Purification", *Journal of Electrical and Electronics Engineering*, ISSN 1844-6035 (BDI: DOAJ, Copernicus, Ulrich's, JorunalSeek, INTUTE, EBSCO), Vol. 3, No. 2, 2010, pp. 71-76.

A.45 Ioan R. Ciric, Florea I. Hantila, Mihai Maricaru, "A new vector potential BEM for magnetic fields bounded by perfect conductors", *IEEE Transactions on Magnetics*, . **(ISI)** ISSN 0018-9464, Vol. 47, No. 5, 2011, pp. 1350-1353.

A.46 Augustin Moraru, Mihai Maricaru, Ioan R. Ciric, Mihai Vasiliu, Ioan Florea Hănţilă, "Efficient field computation in structures with thin shields and magnetizable media", ***Rev. Roum. Sci. Techn, serie Electrotechn. et Energ.***, . **(ISI)** ISSN: 0035-4066, Vol. 56, No.2, 2011, pp. 121-130.

A.47 Ioan Florea Hănţilă, Ioan R. Ciric, Mihai Maricaru, Bogdan Vărăticeanu, Livia Bandici, "A dynamic overrelaxation procedure for solving nonlinear periodic field problems", ***Rev. Roum. Sci. Techn, serie Electrotechn. et Energ***., . **(ISI)** ISSN: 0035-4066, Vol. 56, No.2, 2011, pp. 169-178.

A.48 Valer Giurgiu, Ioan Florea Hantila, Mihai Maricaru, Marilena Stanculescu, "The numerical calculation of HV fuses pre-arcing time in the case of transversal adiabatic process", Applied Electromagnetic Engineering for Magnetic, Superconducting And Nanomaterials (Conf: 6th Japanese-Mediterranean Workshop on Applied Electromagnetic Engineering for Magnetic Superconducting and Nanomaterials), *Book Series: Materials Science Forum*, ISSN: 0255-5476, vol. 670, pp. 526-534, DOI: 10.4028/www.scientific.net/MSF.670.526, 2011.

A.49 Marilena Stanculescu, Mihai Maricaru, Florea I. Hantila, Stelian Marinescu, Livia Bandici, "An iterative finite element - boundary element method for efficient magnetic field computation in transformers", ***Rev. Roum. Sci. Techn, serie Electrotechn. et Energ***., . **(ISI)** ISSN 0035-4066, vol. 56, no.3, 2011, pp. 267-276.

A.50 I. R. Ciric, F. I. Hantila, M. Maricaru, "Convergence acceleration in the polarization method for nonlinear periodic fields", *COMPEL: The International Journal for Computation and Mathematics in Electrical and Electronic Engineering*, . **(ISI)** ISSN 0332-1649, vol. 30, no.6, Dec. 2011, pp. 1688-1700.

A.51 Ioan R. Ciric, Florea I. Hantila, Mihai Maricaru, Stelian Marinescu, "Efficient iterative integral technique for computation of fields in electric machines with rotor eccentricity", *IEEE Transactions on Magnetics*, . **(ISI)** ISSN 0018 9464, vol. 48, no. 2, Feb. 2012, pp. 1015-1018.

A.52 Florea Ioan Hănţilă, Mihai Maricaru, Radu Mircea Ciuceanu, Lilica Corlan, "Harmonic analysis of circuits with nonlinear resistive elements", ***Rev. Roum. Sci. Techn, serie Electrotechn. et Energ.***, . **(ISI)** ISSN 0035-4066, Vol. 57, No.4, 2012, pp. 333-340.

A.53 Mihai Maricaru, Marilena Stanculescu, Valeriu Ştefan Minculete, Florea Ioan Hănţilă, "Solidification surface speed control of ferromagnetic pieces using eddy current heating", *Rev. Roum. Sci. Techn, serie Electrotechn. et Energ.*, . **(ISI)** ISSN 0035-4066, Vol. 57, No.4, 2012, pp. 351-360.

A.54 M. Stănculescu, M. Maricaru, V. Ştefan Minculete, S. Marinescu, I.F. Hănţilă, "Analytical solution for eddy current problem, using space eigenfunctions expansion", *Rev. Roum. Sci. Techn, serie Electrotechn. et Energ.* **(ISI)**, ISSN 0035-4066, Vol. 58, No.2, 2013, pp. 123-134.

A.55 M. Maricaru, G.M. Vasilescu, I. F. Hănţilă, "Levitation of a conducting sheet considering three degrees of freedom", *Rev. Roum. Sci. Techn, serie Electrotechn. et Energ.* **(ISI)**, ISSN 0035-4066, Vol. 58, No.4, 2013 (aprobată spre publicare, în curs de apariţie).

A.56 M. Maricaru, H. Gavrila, G.M. Vasilescu, I. F. Hănţilă, "Analysis of the motion of conducting sheets in magnetic fields", *IEEE Transactions on Magnetics* **(ISI)**, ISSN 0018 9464, vol. 50, no. 2, Feb. 2013, DOI: 10.1109/TMAG.2013.2282772 (aprobată spre publicare, în curs de apariţie).

B) Scientific papers published in international conference proceedings

B.1 F. Hantila, M.Vasiliu, E.Demeter, G.Preda, "Sensitivities for a Synchronous Generator", *Proceedings of International Symposium on Applied Electromagnetics and Mechanics, ISEM'2001*, 13-16 May, 2001, Tokyo, Japonia, (publicata în *JSAEM Studies in Applied Electromagnetics and Mechanics*, 9, ISBN 4-931455-08-5, ISSN 1343-2869, 2001), p.593-594,

B.2 M.Vasiliu, A.Moraru, M.Stanculescu, F.Hantila, "Minimizing Winding Losses under Trapezoidal Current Waveforms", *Proceedings of International Symposium on Applied Electromagnetics and Mechanics, ISEM'2001*, 13-16 May, 2001, Tokyo, Japonia, (publicata în *JSAEM Studies in Applied Electromagnetics and Mechanics*, 9, ISBN 4-931455-08-5, ISSN 1343-2869, 2001), p.205-206,

B.3 G.Preda, Z.Chen, B.Cranganu, F.Hantila, K.Miya, "3D Nonlinear Static Magnetic Field Simulation usiong an Integral Mathod", *Proceedings of International Symposium on Applied Electromagnetics and Mechanics, ISEM'2001*, 13-16 May, 2001, Tokyo, Japonia, (publicata în *JSAEM Studies in Applied Electromagnetics and Mechanics*, 9, ISBN 4-931455-08-5, ISSN 1343-2869, 2001), p.251-252,

B.4 F. Hantila, B.Cranganu-Cretu, K.Miya, "Force Evaluation Formula for Integral Methods of Magnetic Field Computation", *Proceedings of International Symposium on Applied Electromagnetics and Mechanics,* ISEM'2001, 13-16 May, 2001, Tokyo, Japonia, (publicata în *JSAEM Studies in Applied Electromagnetics and Mechanics*, 9, ISBN 4-931455-08-5, ISSN 1343-2869, 2001), p.233-234,

B.5 B.Cranganu-Cretu, T.Maghiar, T.Leuca, M.Silaghi, F.Hantila, "Losses Estimation in Microwave Ovens", *Proceedings of International Symposium on Applied Electromagnetics and Mechanics, ISEM'2001*, 13-16 May, 2001, Tokyo, Japonia, (publicata în *JSAEM Studies in Applied Electromagnetics and Mechanics*, 9, ISBN 4-931455-08-5, ISSN 1343-2869, 2001), p.237-238,

B.6 M.Iordache, L.Dumitriu, F.Hantila, N.Voicu, "A Computing Method for Thermal Field Determination in Turbo-Generator Rotors", *RJJSAEM'01,* 10-14 sept, 2001, Oradea, p.101-108,

B.7 T.Maghiar, T.Leuca, F. Hantila, M.Vasiliu, P.Pencioiu, "BEM Approach of Electromagnetic Field Computation in Microwave Ovens", *RJJSAEM'01*, 10-14 sept, 2001, Oradea, p.149-154,

B.8 T.Maghiar, T.Leuca, St.Nagy, F. Hantila, O.Drosu, M.Vasiliu, "A Method of Evaluating the Errors of FEM Numerical Solution", *RJJSAEM'01*, 10-14 sept, 2001, Oradea, p.144-148,

B.9 T.Maghiar, F. Hantila, M.Vasiliu, E.Demeter,V.Nitigus, "An efficient method for anlysis of PM Synchronous Generator Voltage", *RJJSAEM'01*, 10-14 sept, 2001, Oradea, p.134-139,

B.10 T.Maghiar, O.Drosu, T.Leuca, M.Silaghi, B.Cranganu, F.Hantila, "FEM Approach for Electromagnetic Field Computation in Microwave Ovens", *RJJSAEM'01*, 10-14 sept, 2001, Oradea, p.140-143,

B.11 T.Maghiar, M.Silaghi, F. Hantila, M.Vasiliu, Y. Kawase, "Existence and Stability of the Stationary Field in Non-linear Media", *RJJSAEM'01*, 10-14 sept, 2001, Oradea, p.155-157,

B.12 R. Ciric, F. Hantila , C. Ifrim , Elek Demeter, "Temperature dependence of the permanent magnet synchronous generator voltage", *The 27th annual ARA Congres*, May 29th, June 2tn, 2002, Oradea, Romania,

B.13 F. Hantila, I.R.Ciric, "Magnetic vector potential tree edge values for boundary elements", *CEFC2002*, 16-19 June, 2002, Perugia, Italia,

B.14 I.R. Ciric, F.Hantila, C.Ifrim , El.Demeter, "Effect of variation in magnetization characteristic of the permanent magnet synchronous generator performance", *EPNC'2002*, 1-3 July, 2002, Leuven, Belgia,

B.15 I.R.Ciric, T.Maghiar, F.Hantila , Costin Ifrim, "Error bounds for the FEM numerical solution of nonlinear field problems", *EPNC'2002*, 1-3 July, 2002, Leuven, Belgia,

B.16 C. Ifrim. F. Hantila, M. Vasiliu, I. R. Ciric, "Errors in Numerical Nonlinear Field Problems", *ISEM'03*, 12-14 May, 2003, Versailles, Franta, p.374-375,

B.17 F. Hantila, M. Vasiliu, M. Maricaru, A. Della Giacomo, "Boundary Element Method for Multiply Connected Domains", *JAPMED'03,* Athena, 19-21 mai 2003,

B.18 B. Cranganu-Cretu, F.Hantila and T.Leuca, "Microwave Ovens Electromagnetic Field Analysis by Means of Boundary Element Method", *JAPMED'03,* Athena, 19-21 mai 2003,

B.19 F. Hantila, C.Mihai, C.Ifrim, and T.Leuca, "A New Procedure for Reconstruct the Aged Regions of the Ferromagnetic Bodies", *11th International IGTE Symposium 2004, Graz*, Austria, p.446-449,

B.20 M.Maricaru, T.Maghiar, M.Silaghi,and F.Hantila, "Scalar BEM for Magnetic Field Computation in Multiply Connected Domains", *11th International IGTE Symposium 2004*, Graz, Austria, p.68-70,

B.21 F.Hantila, M.Maricaru, Cl.Popescu, C.Ifrim, St.Ganatsios, "Performances of a Waste Recycling Separator with Permanent Magnets", *JAPMED4*, 17-20 September 2005, Cairo, Egypt, pp. 179-180

B.22 I.R. Ciric, F. Hantila, M. Maricaru, and C. Ifrim, "Reconstruction of flaws in ferromagnetic materials by an efficient zooming method", *ISEM'05*, 12-15 Sept.2005, Austria, ISBN 3-902105-00-1.

B.23 I. Ciric and F. Hantila, "An Efficient Harmonic Method for Solving Nonlinear Time-Periodic Eddy-Current Problems", *CEFC2006, 30 April – 3 May, 2006,* Miami, Florida, USA, pp.348, 2006,

B.24 I.Ciric, F.Hantila, M.Maricaru, and St.Marinescu, "Usage of Permanent Magnets in Reconstructing of Flaws in Ferromagnetic Materials", OIPE 2006 *The 9th Workshop on Optimization and Inverse Problems in Electromagnetics* - September 13th – 15th 2006, Sorrento (Italy) , ISBN 88 7146 733-7, pp. 249-250.,

B.25 I.Ciric, F.Hantila, M.Maricaru, and St.Marinescu, "Behavior of Syncronous Generators with Rotor Excentricity Evaluated by the Polarization Fixed Point Method", *The 17-th International Conference on Electrical Machines - ICEM2006*, September 2-5, 2006, Chania, Crete Island, Greece, p51

B.26 F.Hantila, M.Vasiliu, "Electromagnetic Field Analysis of High Frequency Circuit Elements", *ICCSC'06,* July 6- 7, 2006, Bucuresti, p.258, ISBN 973-755-069-2 / 978-755-069-9

B.27 I.Ciric, F.Hantila, and M.Maricaru "Novel Solution to Eddy-Current Heating of Ferromagnetic Bodies with Nonlinear B-H Characteristic Dependent on Temperature", *COMPUMAG 2007*, June 26, 2007, Aachen, Germany, p.621-622,

B.28 I.Ciric, F.Hantila, M.Maricaru, and St.Marinescu, "An Efficient Procedure for Reconstruction of the Aged Zone in Ferromagnetic Bodies", *Proceedings of ICSAM 07*, Patras, 3-7 sept., 2007, p. 213.

B.29 F. Hantila, M. Maricaru, O. Drosu, S. Marinescu, "Eddy-Current Melting of Ferromagnetic Bodies", JAPMED 07, 16-19 sept. 2007, Larnaca, Cyprus, pp.109-110,

B.30 F. Hantila, O. Drosu, M. Maricaru, "Breast Tumor Detection using the Numerical Analysis of the Thermal Inverse Problem", *JAPMED 07,* 16-19 sept. 2007, Larnaca, Cyprus, pp.107-108,

B.31 M.Arion, T.Leuca, F.Hantila, "Numerical Analysis Method for Solving the Coupled Electromagnetic and Thermal Field Questions for Induction Heating Systems with Moving Parts"|, *JAPMED 07,* 16-19 sept. 2007, Larnaca, Cyprus, pp.111-112,

B.32 M.Silaghi, T.Leuca, P.Pencioiu, V.Turcin, M.Vasiliu, F.Hantila, "Continuous Flow Processing of Milk", *11-th International Conference on Microwave and High Frequency Heating (AMPERE 11)*, 3-6 Sept. 2007, Oradea, Romania, pp.161-164,

B.33 I.Ciric, F.Hantila, M.Maricaru, and St.Marinescu, "Efficient Analysis of the Solidification of Moving Ferromagnetic Bodies with Eddy-Current Control", *Proceedings of the 13th Biennial IEEE Conference on Electromagnetic Field Computation (CEFC2008)*, Athens, May 11-15, 2008, CD-ROM.

B.34 Gabriel Preda, Florea Ioan Hantila, and Mihai Rebican, "Eddy Current Solver for Nondestructive Testing using an Integral-FEM Approach and Zero-Thickness Flaw Model", *Proceedings of the 13th Biennial IEEE Conference on Electromagnetic Field Computation (CEFC2008)*, Athens, May 11-15, 2008, CD-ROM.

B.35 I.F. Hantila, F. Constantinescu, M.Maricaru, C. Ifrim, "A New Algorithm for Frequency Domain Analysis of Nonlinear Circuits", *Proceedings of the IASTED International Conference on Circuits & Systems*, August 18-20, 2008, Kailua-Kona, Hawaii, USA, ACTA Press, ISBN 978-0-88986-753-6, pp. 159-163.

B.36 Florea I. Hantila, Ioan R. Ciric, Augustin Moraru, Mihai Maricaru, "Modelling Eddy Currents in Thin Shields", *Book of Abstracts ot The 13th International IGTE Symposium on Numerical Field Calculation in Electrical Engineering*, Sept. 22-24, 2008, Graz, Austria, p. 104.

B.37 Calin TIU, Florea I. HANTILA, Oana DROSU, Mihai MARICARU, Adriana S. NICA, "Localizing a Breast Tumor with Thermographical Methods", *SMIT* Proceedings ISBN 3-902087-25-0 (MITAT, Vol. 17, no. 4. pp 209–245), 28-30 August 2008, Viena, Austria;

B.38 C. Tiu, F. Hantila, O.M. Drosu, M. Maricaru, A.S. Nica, S. Ioacara, "A double-blind investigation, ultrasound versus the inverse thermal field issue in infrared, related to the breast cancer screening and evaluation", *SMIT Proceedings* ISBN 3-902087-25-0, 28-30 August 2008, Viena, Austria;

B.39 Hantila I., Tiu Calin, "Evaluation of breast tumor dimensions by finding the solution of change-over problem in thermic field", *International Workshop on Theory and Practice of Infrared Imaging in Medicine – Update in Medical Termography*, 11th - 13th September 2008 – Bucharest, Romania;

B.40 Hantila, I.F., Constantinescu, F., Gheorghe, A.G., Nitescu, M., „A frequency domain method for analysis of dynamic circuits with resistive nonlinearities", *4th European Conference on Circuits and Systems for Communications, ECCSC '08*, art. no. 4611677, July 10-11, 2008, Politehnica University of Bucharest, pp. 201-204;

B.41 Hantila, I.F., Vasiliu, M., „Energy transfer in circuits with radiation, 4th European Conference on Circuits and Systems for Communications", *ECCSC '08*, art. no. 4611642, July 10-11, 2008, Politehnica University of Bucharest pp. 1-4.

B.42 O. Drosu, F. Hantila, M. Maricaru, C. Tiu, "Using thermal field analysis as a new method for screening and early detection of breast tumors", *SMIT 2009*, 7-9 Oct 2009,Sinaia Romania, pp. 104-105.

B.43 O.M. Drosu, M. Maricaru, F. Hantila, "Thermal Field Analysis for Breast Tumor Detection", *IMA 2009*, 4-8 Oct. 2009, Athens, Greece, p. 154.

B.44 Ioan R. Ciric, Florea I. Hantila, Augustin Moraru, Mihai Maricaru, "Performance analysis of multiply connected thin shields", *Applied Electromagnetics and Mechanics (II), Book Series: Jsaem Studies In Applied Electromagnetics and Mechanics*, ISSN: 1343-2869, ISBN: 978-4-931455-14-6, vol. 13, 2009, pp. 51-52, 2009.

B.45 Ioan Florea Hantila, Mihai Maricaru, Marilena Stanculescu, Valer Giurgiu, "The Numerical Calculation of HV Fuses Pre-Arcing Time in the Case of Adiabatic Process", *JAPMED'6 (6th Japanese-Mediterraneean Workshop on Applied Electromagnetic Engineering for Magnetic, Superconducting and Nano Materials)* Extended Abstracts Proceedings, ISBN 978-606-521-346-3, July 27-29, 2009, pp. 201-202.

B.46 Oana Drosu, Florea Hantila, Mihai Maricaru, Calin Tiu, "A Three-Dimensional FEM Model of Breast Cancer Localisation Using Thermographical Investigation", *JAPMED'6 (6th Japanese-Mediterraneean Workshop on Applied Electromagnetic Engineering for Magnetic, Superconducting and Nano Materials)* Extended Abstracts Proceedings, ISBN 978-606-521-346-3, July 27-29, 2009, pp. 151-152.

B.47 Ioan Florea Hantila, Mihai Vasiliu, Augustin Moraru, Mihai Maricaru, "Utilizing the Polarization Method for Solving a Nonlinear Magnetic Shielding Problem", *JAPMED'6 (6th Japanese-Mediterraneean Workshop on Applied Electromagnetic Engineering for Magnetic, Superconducting and Nano Materials)* Extended Abstracts Proceedings, ISBN 978-606-521-346-3, July 27-29, 2009, pp. 93-94.

B.48 O. Drosu, F. I. Hantila, M. Maricaru, "Numerical Simulation of Inverse Problem for Thermal Field in Breast Cancer Screening and Detection", *EPSMSO 2009*, 8-11 July 2009, Athens, Greece, p. 38.

B.49 Gabriel Preda, Mihai Rebican, Florea I. Hantila, "Integral Formulation and Genetic Algorithms for Defects Geometry Reconstruction using Pulse Eddy Currents", *Proceedings of the 17th Conference on the Computation of Electromagnetic Fields* (CDROM), 22-26 November, 2009, Florianópolis, Brazil, pp. 75-76.

B.50 Ioan R. Ciric, Florea I. Hantila, Mihai Maricaru, "Field Analysis for Thin Shields in the Presence of Ferromagnetic Bodies", *Proceedings of the 17th Conference on the Computation of Electromagnetic Fields* (CDROM), 22-26 November, 2009, Florianópolis, Brazil, pp. 119-120.

B.51 I. R. Ciric, M. Maricaru, I.F. Hantila, S. Marinescu, "Iterative FEM-BEM technique for an efficient computation of magnetic fields in regions with ferromagnetic bodies", *2010 XIX International Conference on Electrical Machines (ICEM)*, Issue Date : 6-8 Sept. 2010, Location: Rome, Italy, Print ISBN: 978-1-4244-4174-7, Digital Object Identifier: 10.1109/ICELMACH.2010.5608292, 2010, pp. 1 – 6.

B.52 Ioan R. Ciric, Florea I. Hantila, Mihai Maricaru, "A new vector potential BEM for magnetic fields bounded by perfect conductors", *14th Biennial IEEE Conference on Electromagnetic Field Computation (CEFC)*, 2010, Issue Date : 9-12 May 2010, Location: Chicago, IL, USA, Print ISBN: 978-1-4244-7059-4, Digital Object Identifier : 10.1109/CEFC.2010.5481682, On page(s): 1 – 1.

B.53 Ioan R. Ciric, Florea I. Hantila, Mihai Maricaru, "Convergence Acceleration in the Polarization Method Solution of Nonlinear Periodic Field Problems", in Abstracts 14-th International IGTE Symposium on Numerical Field Calculation in Electrical Engineering – IGTE 2010, Graz, Austria, p.3.

B.54 Ioan R. Ciric, Florea I. Hantila, Mihai Maricaru, Stelian Marinescu, "Efficient iterative integral technique for computation of fields in electric machines with rotor eccentricity", Proceedings of the *18th Conference on the Computation of Electromagnetic Fields COMPUMAG 2011*, 12-15 July, Sydney, Australia, ID341, 2 pgs.

B.55 M. Maricaru, I.R. Ciric, F.I. Hantila, I. Hantila, "Fast and accurate analysis of thin shields with holes based on the current sheet integral equation", *2011 IEEE International Conference on Microwaves, Communications, Antennas and Electronics Systems (COMCAS)*, pp.1-4, DOI: 10.1109/COMCAS.2011.6105895, 7-9 Nov. 2011.

B.56 F.I. Hantila, M. Maricaru, F. Constantinescu, R. Ciuceanu, "A new method for time domain computation of the steady state in nonlinear circuits", *2011 IEEE International Conference on Microwaves, Communications, Antennas and Electronics Systems (COMCAS)*, pp.1-6, DOI : 10.1109/COMCAS.2011.6105918, 7-9 Nov. 2011.

B.57 Mihai Maricaru, Ioan R. Ciric, Florea I. Hantila, George-Marian Vasilescu "Bodies motion computation using eddy-current integral equation", *IGTE'12 Abstracts*, 15th International IGTE Symposium on Numerical Field Calculation in Electrical Engineering, Graz, Austria 16-19, septembrie, 2012, p. 76,

B.58 [M. Maricaru, I.R. Ciric, F.I. Hantila, G.M. Vasilescu "Computation of the motion of conducting bodies using the eddy-current integral equation", IGTE'12 Proceedings, ISBN: 978-3-85125-258-3, 15th International IGTE Symposium on Numerical Field Calculation in Electrical Engineering, Graz, Austria 16-19, septembrie, 2012, pp. 352-356.

B.59 M. Maricaru, I.R. Ciric, F.I. Hantila, H. Gavrila, G.M. Vasilescu, "A frequency-domain solution for the motion of levitated conductors", 2013 8th International Symposium on Advanced Topics in Electrical Engineering (ATEE), , pp. 1-4, 23-25 May 2013, DOI: 10.1109/ATEE.2013.6563444.

B.60 V.S. Stanciu, I. Barsan, F.I Hantila, M. Maricaru, Marilena Stanculescu, "Pulsed operation analysis of the thermoelectric generators used in space applications", 2013 8th International Symposium on Advanced Topics in Electrical Engineering (ATEE), pp.1-6, 23-25 May 2013, DOI: 10.1109/ATEE.2013.6563503.

B.61 H. Gavrila, M. Stanculescu, M. Maricaru, M. Vasilescu, P. Andrei, I. F. Hantila, "„In Situ" evaluation of ferromagnetic bodies magnetic characteristics", JAPMED'8 (8th Japanese-Mediterraneean Workshop on Applied Electromagnetic Engineering for Magnetic, Superconducting and Nano Materials) Extended Abstracts Proceedings (CD-ROM), June 23-26, Atena, Grecia, 2013, pp. 1-2.

B.62 M. Maricaru, I.R. Ciric, H. Gavrila, G.M. Vasilescu, F.I. Hantila, "Analysis of the motion of conducting sheets in magnetic fields", Proceedings of the 19th Conference on the Computation of Electromagnetic Fields, COMPUMAG 2013, 30 June - 4 July 2013, Budapesta, Ungaria, PA2-14, 2 pgs.

Note:. Organizers of some conferences select a part of communications and recommend the authors the publishing of an extended form paper in scientific specialized journals. The extended papers are subject to a new review and their content differs from that presented at conference. Thus some titles may be repeated in the head A and B.

C) Scientific papers published in national conference proceedings

C.1 P.Pencioiu, N.Vasile, B.Cranganu-Cretu, F.Hantila, "Vectorial BEM formulation for multiply connected domains", *RSEE*'2002, 6-9 June, 2002, Stana de Vale – Spa, Romania,

C.2 B. Cranganu-Cretu, T. Leuca, M. O. Popescu, F. Hantila, "Genetic algorithm for depth flow reconstruction", *RSEE'2002*, 6-9 June, 2002, Stana de Vale – Spa, Romania,

C.3 T. Maghiar, S. Nagy, M. Vasiliu, F. Hantila, "Error evaluation for nonlinear magnetic field problems", *RSEE'2002*, 6-9 June, 2002, Stana de Vale – Spa, Romania,

C.4 M. Vasiliu, T. Leuca, Florea Hantila, H. Andrei, C.Ifrim, "Error bounds for numerical solution of nonlinear magnetic field problems", *ATEE'02*, *Advanced Topics in Electrical Engineering*, 29.11.2002, Bucharest, Romania, ISBN: 973-652-674-7, p.7-10,

C.5 E. Demeter, F. Hantila, H. Silaghi, V. Nitigus, M.Marinescu*, "B-H relationship dependence of the synchronous generator voltage", *ATEE'02*, *Advanced Topics in Electrical Engineering*, 29.11.2002, Bucharest, Romania, ISBN: 973-652-674-7, p.11-14,

C.6 N.Vasile, M. Maricaru, P.Pencioiu, I.R.Ciric, F. Hantila, " New vectorial BEM formulation", *ATEE'02, Advanced Topics in Electrical Engineering*, 29.11.2002, Bucharest, Romania, ISBN: 973-652-674-7, p.15-18,

C.7 M.Vasiliu, O.Drosu, F,Hantila, "Non-sinusoidal formulae for symbolic analysis of linear systems", *ATEE'02*, *Advanced Topics in Electrical Engineering*, 29.11.2002, Bucharest, Romania, ISBN: 973-652-674-7, p.86-89,

C.8 F.Hantila, F.Constantinescu, M.Nitescu, H.Silaghi, H.Andrei, "Errors of FEM Numerical Computation of Nonlinear Field Problems", *ISEM 2000, International Symposium on Electrical Engineering and Electric Materials*, 4-5.07.2002, Targoviste,

C.9 H.Andrei, C.Cepisca, F.Hantila, V.Dogaru-Ulieru , "Electromagnetic Waves, Radiations and Pollution", *METSIM' 2002. International Conference on Metrology & Measurement Systems*, Bucharest, June 27-28, 2002;

C.10 C.Ifrim, C.Mihai, F.Hantila, "Computational Errors for Solving Nonlinear Field Problems in Unbounded Domains, using Green Function", *ISEE 2003,* November 3,4 2003, Targoviste, p.129-133,

C.11 T.Maghiar, H.Gavrilă, F.Hănţilă, M.Vasiliu, **"**Errors in Numerical Nonlinear Field Problems", *EMES'03*, 29-31 may, 2003, pp.56-59, Oradea,

C.12 C.Mihai, I. Hănţilă, F. Hănţilă, M.Silaghi, **"**Some Aspects of Thermic Non-Destructive Testing", *EMES'03*, 29-31 may, 2003, pp.185-188, Oradea,

C.13 M.O.Popescu, F.Hantila, M.Covrig, C.L.Popescu, V.Trusca, N.Vasile, "Educaţie în ingineria electrică prin cercetare în programe de master şi doctorat", *ISEE 2003,* November 3,4 2003, Targoviste, p.129-133,

C.14 Cl.Mihai, F. Hantila, R. Enache, T.Leuca, "Aspecte deterministe privind controlul nedestructiv in camp termic", *SNET'03*, Bucuresti, 2003, pp.7-10, ISBN 973-652-800-6

C.15 M.Maricaru, F.Hantila, M.Vasiliu, A. della Giacomo, "Metoda Elementelor de Frontiera pentru Domenii Multiplu Conexe", *SNET'03*, Bucuresti, 2003, ISBN 973-652-800-6

C.16 C. Ifrim, F. Hantila, M. Vasiliu, I. R. Ciric, T. Maghiar, "Error Evaluation for Numerical Solving of Nonlinear Magnetic Field", *SNET'03*, Bucuresti, 2003, pp.11-14, ISBN 973-652-800-6,

C.17 P.Pencioiu, F.Hantila, M.Maricaru, and C.Cepisca, - Boundary Element Method for Solving Electromagnetic Field in Microwave Ovens -, *Proceedings of ISEE*, 3-4 Nov., 2003, Targoviste, Romania, CD-ROM, ISBN: 973-8413-47-8,

C.18 Stergios Ganatios, Teodor Maghiar, Cl. Mihai, F. Hantila. M. Maricaru, M. Chisamera, „Computation of the Magnetic Forces for a Waste Recycling Separator"**,** *The 5'Th International Conference on Renewable Sources and Environmental Electro-Technologies*, University of Oradea, 27 – 29 May 2004.

C.19 St.Ganatsios, N.Vasile, P.Pencioiu, F.Hantila, M.Maricaru, Fl.Constantinescu, "Waste Recycling Separator with Permanent Magnets", *Masa rotunda pe tema energiilor regenerabile*, 26-27 Aug. 2004, Agigea,

C.20 F.Hantila, M.O.Popescu, N.Vasile, P.Pencioiu, V.Turcin, St.Ganatsios, "Eddy current no pollution treatment of the agriculture tools", *Masa rotunda pe tema energiilor regenerabile*, 26-27 Aug. 2004, Agigea,

C.21 F.Hantila, M.Marinescu, M.Vasiliu, I.Hantila, "Influence of B-H Measurment Error for PM Synchronous Generator Voltage Computation ", *Proceedings os SNET'04*, 22-23 oct.2004, Bucuresti, Romania, CD-ROM, ISBN 973-718-096-8,

C.22 F.Hantila, M.Vasiliu, R.Enache, I.Hantila, "Qualitative Aspects regarding to Magnetic Field in Non-linear Media ", *Proceedings of SNET'04,* 22-23 oct.2004, Bucuresti, Romania, CD-ROM, ISBN 973-718-096-8,

C.23 F.Hantila, C.Mihai, C.Ifrim, and T.Leuca, "Reconstruct of the Aged Regions in the Ferromagnetic Bodies", *4-th ATEE*, 25-26 nov. 2004, Bucharest, Romania,

C.24 M.Maricaru, T.Maghiar, M.Silaghi,and F.Hantila, "Inductance Computation using Scalar BEM", *4-th ATEE*, 25-26 nov. 2004, Bucharest, Romania,

C.25 C.Ifrim, F.Hantila, M.Vasiliu, I.R. Ciric, "Errors in Numerical Solving of Nonlinear Magnetic Field Problems", *4-th ATEE*, 25-26 nov. 2004, Bucharest, Romania.

C.26 F Hantila, M. Vasiliu, "Timotin's Formula", *Proceedings of SNET'05*, 12-14 may, 2005, Bucuresti, Romania, pp.26-30, CD-ROM, ISBN 973-618-268-5,

C.27 F. Hantila, C.Mihai, M.Maricaru, I.R. Ciric, "Reconstrucţia zonelor imbătranite ale pieselor feromagnetice", *Proceedings of SNET'05*, 12-14 may, 2005, Bucuresti, Romania, pp.49-56, CD-ROM, ISBN 973-618-268-5,

C.28 F. Hantila, I. Hantila, I.Barsan, I.Păuna, "Detecţia defectelor in ţevile de termoficare", *Proceedings of SNET'05*, 12-14 may, 2005, Bucuresti, Romania, pp.86-89, CD-ROM, ISBN 973-618-268-5,

C.29 P.Pencioiu, V.Turcin, A.Anghel, M.Maricaru, F. Hantila, "Electromagnetic Heating of the Soildressing Equipment", *Proceedings of SNET'05*, 12-14 may, 2005, Bucuresti, Romania, pp.77-80, CD-ROM, ISBN 973-618-268-5,

C.30 I.R. Ciric, F. Hantila, M. Maricaru, C.P. Mihai, M. Vasiliu, L. Ocheana, S. Marinescu, „Utilizarea fluxului de dispersie la reconstrucţia defectelor în piese feromagnetice", *Volum Conferinţa: Cercetare de excelenţă – premiză favorabilă pentru dezvoltarea spaţiului românesc de cercetare*, , ISBN 978-973-718-552-5, 22-24 oct. 2006, Braşov, pp. L3-9:1-4.

C.31 A.Stanculescu, M.Maricaru, F.Hantila, M.Vasiliu, F.Spinei, „Performances of a nonlinear transducer", *ISEE Proceedings,* 17-19 Oct., 2005, Targoviste, Romania, ISBN 973-8413-47-8.

C.32 M.Maricaru, F.Hantila, M.Vasiliu, St.Marinescu, F.Spinei,*"* Determinarea campului magnetic prin metode hibride", *ATEE 2006*, 24-25 nov., 2006, S6 pp.1-4, Bucuresti, ISBN 973-8987-12-1 ISBN 978-973-8987-12-8 ISBN 973-8987-14-8 ISBN 978-973-8987-41-2

C.33 F.Hantila, I.Ciric, St.Marinescu, M.Maricaru, "Synchronous Generators Voltage Dependence with Rotor Eccentricity", *ATEE 2006*, 24-25 nov., 2006, S6 pp.7-11, Bucuresti, ISBN 973-8987-12-1 ISBN 978-973-8987-12-8 ISBN 973-8987-14-8 ISBN 978-973-8987-41-2

C.34 F.Hantila, I.Ciric, St. Marinescu, M.Maricaru, Cl.Mihai, "Analiza incalzirii pieselor feromagnetice, folosind metoda ecuatiei integrale a curentilor turbionari", *ATEE 2006*, 24-25 nov., 2006, S6 pp.5-6, Bucuresti, ISBN 973-8987-12-1 ISBN 978-973-8987-12-8 ISBN 973-8987-14-8 ISBN 978-973-8987-41-2

C.35 P.Pencioiu, V.Turcin, M.Vasiliu, F.Hantila, "Solutionarea problemelor de microunde in procesele de pasteurizare a produselor alimentare", *ATEE 2006*, 24-25 nov., 2006, S7 pp.1-3, Bucuresti, ISBN 973-8987-12-1 ISBN 978-973-8987-12-8 ISBN 973-8987-14-8 ISBN 978-973-8987-41-2

C.36 O.Drosu, B.Cupceancu, F.Hantila, M.Vasiliu, Cl.Mihai, "Metode termografice pentru determinarea formei tumorilor de san", *ATEE 2006*, 24-25 nov., 2006, S7 pp.31-33, Bucuresti, ISBN 973-8987-12-1 ISBN 978-973-8987-12-8 ISBN 973-8987-14-8 ISBN 978-973-8987-41-2

C.37 I. Ciric, F. Hantila, M.Maricaru, and St. Marinescu, "An Efficient Procedure for Reconstruction of the Aged Zone in Ferromagnetic Bodies", *Conferinta AMCSIT*, 24-26 oct., 2007, pp.79_1 – 79_6, Brasov, ISSN 1843-5904,

C.38 F. Hantila, S. Marinescu , A. Nicolaide, V. Ionita, and E. Helera, "The Computation of the Magnetic Field in Electrical Machines", *Conferinta AMCSIT*, 24-26 oct., 2007, pp.215_1 – 215_6, Brasov, ISSN 1843-5904,

C.39 F. Hantila, M. Maricaru, I. Hantila, "Procedura iterativa FEM-BEM pentru calculul campului electromagnetic in medii feromagnetice", *SNET 2007*, Bucuresti, ISBN 978-973-718-899-1, pp.388-393,

C.40 Cl. Popescu, M.O. Popescu, O. Drosu, M. Maricaru, M. Vasiliu, F. Hănţilă, "Metode de calcul al curenţilor induşi în ţesuturi organice", *The 6th Symposium of Electromagnetic Compatibility SICEM 2007*, 16-17 nov. 2007, Bucureşti, ISBN 978-973-7838-51-3, Politehnica Press,

C.41 F.Hantila, M.Maricaru, I.Ciric, and St. Marinescu, "A Half-deterministic Procedure for Reconstruction of the Aged Zone in Ferromagnetic Bodies", *SNET 2007*, Bucuresti, ISBN 978-973-718-899-1, pp.423-427,

C.42 F. Hantila, M. Vasiliu, V. Turcin, P. Pencioiu, "A Flexibile Module for Continuous Flow Microwave Heating" , *SNET 2007*, Bucuresti, ISBN 978-973-718-899-1, pp.59-63,,

C.43 I. Ciric, F. Hantila, M.Maricaru, C.Fluerasu, and St. Marinescu, "Eddy-Current Heating of Ferromagnetic Bodies", *SNET 2007*, Bucuresti, ISBN 978-973-718-899-1, pp.215221

C.44 I. Ciric, F. Hantila, M.Maricaru, P. Pencioiu, and St. Marinescu, "O Metoda Eficienta de Calcul al Parametrilor Masinile Electrice", *SNET 2007*, Bucuresti, ISBN 978-973-718-899-1, pp.491-500,

C.45 F. Hantila, O. Drosu, M. Maricaru, and L.Ocheana, "Thermographical Location of Breast Tumor", *SNET 2007*, Bucuresti, ISBN 978-973-718-899-1, pp.185-191,

C.46 G.Preda, F.Hantila, "Integral FEM Eddy Current Solver for NDT", *SNET 2007*, Bucuresti, ISBN 978-973-718-899-1, pp.412-416,

C.47 F.I. Hănţila, M. Maricaru, S. Marinescu, M. Stănculescu, "The use of FEM-BEM Hybrid Methods for Flaw Shape Reconstruction (Magned)", *CEEX Conference Excellence Research - A Way to Innovation*, Brasov, July 27-28, 2008, pp. C79/1-6.

C.48 F.I. Hănţilă, M. Maricaru, S. Marinescu, F. Ştefănescu, "Novel Solution to EDDY-Current Controled Solidification of Moving Ferromagnetic Bodies with Nonlinear B-H Characteristic Dependent on Temperature", *CEEX Conference Excellence Research - A Way to Innovation*, Brasov, July 27-28, 2008, , pp. C300/1-6 (Lucrare premiata cu premiul de excelenta al Sectiunii de stiinte tehnice- Section 3. Engineering Sciences)

C.49 Mihai MARICARU, Florea I. HĂNŢILĂ, Stelian MARINESCU, Cezar FLUERAŞU, "Eddy Current Controlling of the Liquid-Solid Transition Surface in Moving Solidifying Ferromagnetic Bodies", *Volumul conferinţei SNET 2008 (Simpozionul Naţional de Electrotehnică Teoretică)*, 5-7 iunie 2008, Bucureşti), ISBN 978-606-521-045-5, pp. 37-42.

C.50 Valer Giurgiu, Florea Ioan Hănţilă, Lucian Ocheană, Mihai Maricaru, Mircea Arion, "Densitatea de curent în siguranţe cu structură multiplu conexă", *Volumul conferinţei SNET 2008 (Simpozionul Naţional de Electrotehnică Teoretică)*, 5-7 iunie 2008, Bucureşti), ISBN 978-606-521-045-5, pp. 112-114.

C.51 Florea Ioan Hănţilă, Augustin Moraru, Mihai Maricaru, Mihai Vasiliu, Mihai Octavian Popescu, "Curenţii turbionari în ecrane subţiri", *Volumul conferinţei SNET 2008 (Simpozionul Naţional de Electrotehnică Teoretică),* 5-7 iunie 2008, Bucureşti), ISBN 978-606-521-045-5, pp. 115-118.

C.52 Florea Ioan Hănţilă, Mihai Maricaru, Stelian Marinescu, Fănică Spinei, "Using of Static Magnetic Field for Testing of Flaws in Ferromagnetic Bodies", *Volumul conferinţei SNET 2008 (Simpozionul Naţional de Electrotehnică Teoretică)*, 5-7 iunie 2008, Bucureşti), ISBN 978-606-521-045-5, pp. 119-123.

C.53 I.F.Hănţilă, M.Maricaru, O.Drosu, Cl. Popescu, G.Preda, "Localizarea tumorilor de sân prin metode termografice", *Volumul conferinţei SNET 2008 (Simpozionul Naţional de Electrotehnică Teoretică)*, 5-7 iunie 2008, Bucureşti), ISBN 978-606-521-045-5, pp. 461-466.

C.54 Ioan Florea Hănţilă, Mihai Vasiliu, Valer Turcin, Paul Pencioiu, "Microwave Continuous Flow Heating of Food Liquids", *Volumul conferinţei SNET 2008 (Simpozionul Naţional de Electrotehnică Teoretică)*, 5-7 iunie 2008, Bucureşti), ISBN 978-606-521-045-5, pp. 467-470.

C.55 St.Nagy, T.Leuca, Cl. Mich-Vancea, F.Hantila, "Numerical modeling of the coupled electromagnetic and thermal fields in the solidification structures formation control processes", *Volumul conferinţei SNET 2008 (Simpozionul Naţional de Electrotehnică Teoretică*, 5-7 iunie 2008, Bucureşti), ISBN 978-606-521-045-5, pp. 91-96.

C.56 F.Hantila, F.Constantinescu, A.G.Gheorghe, M.Nitescu, "Un algoritm nou pentru analiza circuitelor neliniare in domeniul frecventei", *Volumul conferinţei SNET 2008 (Simpozionul Naţional de Electrotehnică Teoretică)*, 5-7 iunie 2008, Bucureşti), ISBN 978-606-521-045-5, pp. 223-229.

C.57 Oana Mihaela Drosu, Florea Ioan Hantila, Mihai Maricaru, Evangelos Hristoforou, "Au Fe Nannospheres-Assisted Delivery in Breast Tumour IR Thermography", *National Symposium of Theoretical Electrical Engineering, SNET'09*, Conference Proceedings, ISSN 2067-4147, 2009, pp. 208-210.

C.58 M. Stanculescu, P. Andrei, M. Maricaru, M. Vasilescu, I. F. Hantila, "Evaluarea caracteristicilor magnetice ale pieselor feromagnetice," *National Symposium of Theoretical Electrical Engineering SNET'12 Conference Proceedings*, December 14, 2012, Bucharest, ISSN 2067-4147.

C.59 S. Valeriu Minculete, M. Maricaru, S. Marinescu, M. A. Costea, I. F. Hantila, "Încălzirea carcaselor prin curenţi turbionari," *National Symposium of Theoretical Electrical Engineering SNET'12 Conference Proceedings*, December 14, 2012, Bucharest, ISSN 2067-4147.

D) Books

D.1. F.Hantila, G.Preda, M.Vasiliu, T.Leuca, eE. Della Giacomo,"*Calculul numeric al curentilor turbionari*", Editura ICPE, 2001, ISBN 973-8067-31-6;

D.2. T.Maghiar, T.Leuca, F.Hantila, "*Analiza numerica a proceselor de incalzire prin curenti turbionari*", 2001, Tipografia GrafX, Oradea, ISBN 973-8219-89-2;

D.3.H.Andrei, F.Hantila, N.Folea, M.Ionel, M.Chitu, "*Probleme de matematica culese si propuse pentru bacalaureat si admiterea la facultate*", Ed. Pro Transilvania, 2001, ISBN 973-8149-48-7;
D.4.F.Hantila, T.Leuca, C.Ifrim, "*Electrotehnica teoretica*", vol. I, Editura Electra, 2002, ISBN 973-8067-69-3.
D.5. F.Hantila, "*Campul magnetic in structuri cu magneti permanenti*", Editura Electra, 2004, ISBN 973-7728-22-X.
D.6. F.Hantila, M.Vasiliu, "*Campul electromagnetic variabil in timp*", Editura Electra, 2005, ISBN 973-7728-48-3
D.7. M.Vasiliu, F.Hantila, "*Electromagnetics*", Ed. Electra, 2006, ISBN 10 973 – 7728 – 71 – 8, ISBN 13 978 – 973 – 7728 – 71 – 5,
D.8. I.F.Hănţilă, M.O. Popescu, Cl. Popescu, O.Drosu, M.Maricaru, M. Vasiliu, "*Impactul campurilor electromagnetice de natura antropica asupra ecosistemelor – Partea a II-a: Studiu privind interactiunea campului electromagnetic – structuri celulare evoluate*", Editura Printech, Bucuresti, 2007, ISBN 98-973-718-912-7.
D.9. L.Ocheana, F.Hantila, I.Nemoianu, A.Anghel, "*Bazele electrotehnicii. Culegere de probleme de probleme. Partea I - Curent continuu*", Editura Printech, 2007, ISBN 978-973-718-783-3
D.10. L.Ocheana, F.Hantila, I.Nemoianu, A.Anghel, "*Bazele electrotehnicii. Culegere de probleme de probleme. Partea II - Curent alternativ*", Editura Politehnica Press, 2008, ISBN 978-973-7838-99-5
D.11. L.Ochiana, F.Hantila, I.Nemoianu, *Regimurile circuitelor electrice 720 de aplicatii*, Bucuresti Editura Printech, 2009, isbn: 978-606-521-383-8.
D.12. F.I.Hantila, L.Bandici, T.Leuca, "*Tehnici informatice in ingineria electrica*", ed.Universitatii din Oradea, 2011, 176p

Chapter in Book
D.Popovici, F.Constantinescu, M.Maricaru, F.Hantila, M.Nitescu and A.Gheorghe, Cap.24, „Modeling and Simulation of Piezoelectric Devices", din cartea „*Modelling and Simulation*", editata de Giuseppe Petrone and Giuliano Cammarata, InTech Education and Publishing, ISBN 978-3-902613-25-7, June 2008.

Citations of papers indexed in international databases (www.isiknowledge.com, www.scopus.com) *(without self-citations)*

- **Preda, G., Cranganu-Cretu, B., Hantila, F.I., Mihalache, O., Chen, Z., Miya, K., "Nonlinear FEM-BEM formulation and model-free inversion procedure for reconstruction of cracks using pulse eddy currents," IEEE Transactions on Magnetics 38 (2 I), pp. 1241-1244, 2002.**

Cited by:

1. Tatis, K.V., Kladas, A.G., Tegopoulos, J.A., "Geometry optimization of solid rotor eddy current brake by using sensitivity analysis and 3D finite elements, " Journal of Materials Processing Technology 161 (1-2 SPEC. ISS.), pp. 363-367, 2005.
2. Bernieri A, Ferrigno L, Laracca M, et al, „An SVM approach to crack shape reconstruction in Eddy Current testing", IEEE Instrumentation & measurement technology conference, proceedings, Pages: 2121-2126 Published: 2006
3. Bernieri, A., Ferrigno, L., Laracca, M., Molinara, M., "Crack shape reconstruction in Eddy current testing using machine learning systems for regression", IEEE Transactions on Instrumentation and Measurement 57 (9), pp. 1958-1968, 2008.
4. Chen ZM, Yusa N, Miya K, „Some advances in numerical analysis techniques for quantitative electromagnetic nondestructive evaluation", Nondestructive testing and evaluation Volume: 24 Issue: 1-2 Pages: 69-102 Published: 2009.
5. FEM and ANN combined approach for predicting pressure source parameters at Etna volcano, Author(s): Di Stefano A, Currenti G, Del Negro C, et al.Source: NONLINEAR PROCESSES IN GEOPHYSICS Volume: 17 Issue: 3 Pages: 273-282 Published: 2010

6. A. Bernieri, G. Betta, L. Ferrigno, M. Laracca, "Multi-frequency Eddy Current Testing using a GMR based instrument", *International Journal of Applied Electromagnetics and Mechanics*, ISSN 1383-5416, vol. 39, no. 1-4, 2012, pp. 355-362.
7. A. Bernieri, G. Betta, L. Ferrigno, M. Laracca, "Analysis of the saturated electromagnetic devices under DC bias condition by the decomposed harmonic balance finite element method", *2012 IEEE Sensors Applications Symposium, SAS 2012 - Proceedings ,* art. no. 6166304 ,2012, pp. 114-119.

- **Cranganu-Cretu, B., Hantila, F.I., Preda, G., Chen, Z., Miya, K., "Direct Computation of static difference magnetic field in nonlinear magnetic materials and application to shape reconstruction of damaged areas in aging materials ," IEEE Transactions on Magnetics 38 (2 I), pp. 1073-1076, 2002.**

Cited by:

8. Miya, K., „Recent advancement of electromagnetic nondestructive inspection technology in Japan", IEEE Transactions on Magnetics, Volume 38, Issue 2, Part 1, March 2002 Page(s):321 – 326.
9. Kantartzis, N.V., Tsiboukis, T.D., Kriezis, E.E., "A topologically consistent class of 3-D higher order curvilinear FDTD schemes for dispersion-optimized EMC and material modeling ," Journal of Materials Processing Technology 161 (1-2 SPEC. ISS.), pp. 210-217, 2005.

- **Hantila, F.I., Preda, G., Vasiliu, M., "Polarization method for static fields," IEEE Transactions on Magnetics 36 (4 PART 1), pp. 672-675, 2000.**

Cited by:

10. Cranganu-Cretu, B., Preda, G., Mihalache, O., Chen, Z., Miya, K., "B-H curve reconstruction from MFL signals based on genetic algorithms", International Journal of Applied Electromagnetics and Mechanics 15 (1-4 SPEC), pp. 283-289, 2001.
11. Canova, A.; Repetto, M., „Integral solution of nonlinear magnetostatic field problems", ", IEEE Transactions on Magnetics, Volume 37, Issue 3, May 2001 Page(s):1070 – 1077.
12. Chen, Z., Preda, G., Mihalache, O., Miya, K., " Reconstruction of crack shapes from the MFLT signals by using a rapid forward solver and an optimization approach", IEEE Transactions on Magnetics 38 (2 I), pp. 1025-1028, 2002.
13. Miya, K., "Recent advancement of electromagnetic nondestructive inspection technology in Japan", IEEE Transactions on Magnetics 38 (2 I), pp. 321-326, 2002.
14. Mayergoyz, I.D., Andrei, P., Dimian, M., "Nonlinear magnetostatic calculations based on fast multipole method", IEEE Transactions on Magnetics 39 (3 I), pp. 1103-1106, 2003.
15. Peterson, W., "Fixed-point technique in computing nonlinear eddy current problems", COMPEL - The International Journal for Computation and Mathematics in Electrical and Electronic Engineering 22 (2), pp. 231-252, 2003.
16. Mihai Maricaru, Cleante Mihai, Stergios Ganatsios, Nicolae Vasile, Paul Pencioiu, „Force computation of a PM separator", Rev. Roum. Sci. Techn.– Électrotechn. et Énerg., **49**, *4,* p. , Bucarest, 2004
17. Yuan, J., Clemens, M., De Gersem, H., Weiland, T., "Solution of transient hysteretic magnetic field problems with hybrid Newton-polarization methods," IEEE Transactions on Magnetics 41 (5), pp. 1720-1723, 2005.
18. Außerhofer, S., Bíró, O., Preis, K., " An efficient Harmonic Balance Method for nonlinear eddy current problems," 12th Biennial IEEE Conference on Electromagnetic Field Computation, CEFC 2006, art. no. 1632814, 2006.
19. Bíró, O., Preis, K., "An efficient time domain method for nonlinear periodic eddy current problems," IEEE Transactions on Magnetics 42 (4), pp. 695-698, 2006.
20. Ruoho, S. Arkkio, A., "Mixed-Grade Pole Design for permanent magnet synchronous machines", International Aegean Conference on Electrical Machines and Power Electronics, 2007. ACEMP '07. ,10-12 Sept. 2007, On page(s): 452-457, Bodrum, ISBN: 978-1-4244-0890-0, INSPEC Accession Number: 10013996.
21. Dlala, E.; Belahcen, A.; Arkkio, A., „Locally Convergent Fixed-Point Method for Solving Time-Stepping Nonlinear Field Problems", IEEE Transactions on Magnetics, Volume 43, Issue 11, Nov. 2007 Page(s):3969 - 3975
22. Ausserhofer, S., Bíró, O., Preis, K., "Frequency and time domain analysis of nonlinear periodic electromagnetic problems", 2007 International Conference on Electromagnetics in Advanced Applications, ICEAA'07, art. no. 4387279, pp. 229-232, 2007.
23. Ausserhofer, S., Bíró, O., Preis, K., " An efficient harmonic balance method for nonlinear eddy-current problems," IEEE Transactions on Magnetics 43 (4), pp. 1229-1232, 2007.
24. Dlala, E., Arkkio, A., "Analysis of the convergence of the fixed-point method used for solving nonlinear rotational magnetic field problems," IEEE Transactions on Magnetics 44 (4), art. no. 4475329, pp. 473-478, 2008.

25. Dlala, E., Belahcen, A., Arkkio, A., "A fast fixed-point method for solving magnetic field problems in media of hysteresis", IEEE Transactions on Magnetics 44 (6), art. no. 4526849, pp. 1214-1217, 2008.
26. Außerhofer, S., Bíró, O., Preis, K., "A strategy to improve the convergence of the fixed-point method for nonlinear eddy current problems", IEEE Transactions on Magnetics 44 (6), art. no. 4526792, pp. 1282-1285, 2008.
27. Marcsa D., Kuczmann M., „Nonlinear two-dimensional motional finite element modeling of a rotational eddy current field problem", PRZEGLAD ELEKTROTECHNICZNY, Vol. 85, no. 12, pp. 110-113, 2009.
28. Marcsa D, Kuczmann M, „Direct Preisach Hysteresis Model for Finite Element Analysis of Magnetic Fields", PRZEGLAD ELEKTROTECHNICZNY, vol. 85, no. 12, pp. 114-117, 2009.
29. Paul Minciunescu, Stelian Marinescu, Ioana Hantila, Oana M. Drosu, „FEM-BEM technique for solving the magnetic field in electric machines", Revue Roumaine des Sciences Techniques-Serie Electrotechnique et Energetique, Volume: 56, Issue: 2, Pages: 189-198, APR-JUN 2011.
30. Marcsa Daniel, Kuczmann Miklos, „Two-dimensional modeling of the motion in induction motor with ferromagnetic hysteresis", Revue Roumaine des Sciences Techniques-Serie Electrotechnique et Energetique, Volume: 55 Issue: 4, Pages: 351-356, OCT-DEC 2010.
31. Zhao, Xiaojun; Li, Lin; Lu, Junwei; et al., "Characteristics Analysis of the Square Laminated Core under dc-biased Magnetization by the Fixed-point Harmonic-balanced FEM", IEEE TRANSACTIONS ON MAGNETICS Volume: 48 Issue: 2 Pages: 747-750 DOI: 10.1109/TMAG.2011.2174776 Published: FEB 2012.
32. Bogdan Dumitru Vărăticeanu, Mihai Maricaru, George-Marian Vasilescu, Marius Aurel Costea, "Eddy current integral formulation for electromagnetic field and forces computation in domains with permanent magnets, nonlinear media and moving bodies", *Rev. Roum. Sci. Techn, serie Electrotechn. et Energ.*, ISSN 0035-4066, Vol. 57, No.2, 2012, pp. 134-143.
33. G. Liu, L. Li, X. Zhao, B. Li, Y. Sun, "An effective method of solving anisotropic nonlinear periodic electric field in oil-paper insulation under the AC-DC hybrid voltage", *2012 6th International Conference on Electromagnetic Field Problems and Applications*, ICEF'2012 , art. no. 6310419.
34. X. Zhao, J. Lu, L. Li, H. Li, Z. Cheng, T. Lu, "Fixed-point harmonic-balanced method for dc-biasing hysteresis analysis using the neural network and consuming function", *IEEE Transactions on Magnetics*, ISSN 0018-9464, vol. 48, no. 11, 2012, pp. 3356-3359.
35. X. Zhao, L. Li, J. Lu, Z. Cheng, T. Lu, T., "Characteristics analysis of the square laminated core under dc-biased magnetization by the fixed-point harmonic-balanced FEM", *IEEE Transactions on Magnetics*, ISSN 0018-9464, vol. 48, no. 2, 2012, pp. 747-750.
36. R. Albanese, F. Calvano, G. Dal Mut, F. Ferraioli, A. Formisano, F. Marignetti, R. Martone, A. Romano, G. Rubinacci, A. Tamburrino, S. Ventre, "Coupled three dimensional numerical calculation of forces and stresses on the end windings of large turbo generators via integral formulation", *IEEE Transactions on Magnetics*, ISSN 0018-9464, vol. 48, no. 2, 2012, pp. 875-878.
37. G. Liu, L. Li, X. Zhao, W. Li, B. Li, Y. Sun, F. Ji, J. Li, "Analysis of nonlinear electric field of oil-paper insulation under AC-DC hybrid voltage by fixed point method combined with FEM in frequency domain", *Zhongguo Dianji Gongcheng Xuebao/Proceedings of the Chinese Society of Electrical Engineering,* vol. 32, no. 1, 2012, pp. 154-161.

- **Albanese, R., Hantila, F.I., Preda, G., Rubinacci, G., "A nonlinear eddy-current integral formulation for moving bodies ," IEEE Transactions on Magnetics 34 (5 PART 1), pp. 2529-2534, 1988.**

Cited by:

38. Cranganu-Cretu, B., Preda, G., Mihalache, O., Chen, Z., Miya, K., "B-H curve reconstruction from MFL signals based on genetic algorithms", International Journal of Applied Electromagnetics and Mechanics 15 (1-4 SPEC), pp. 283-289, 2001.
39. Barmada, S., Musolino, A., Raugi, M., Rizzo, R., "Analysis of a homopolar disk generator via equivalent network", IEEE Transactions on Magnetics 39 (1 I), pp. 125-128, 2003.
40. Peterson, W. , "Numerical solution of eddy current problems in ferromagnetic bodies travelling in a transverse magnetic field", International Journal for Numerical Methods in Engineering 58 (12), pp. 1749-1764, 2003.
41. Bottauscio, O.; Chiampi, M.; Ragusa, C., „Transient analysis of hysteretic field problems using fixed point technique", IEEE Transactions on Magnetics, Volume 39, Issue 3, Part 1, May 2003 Page(s):1179 – 1182.
42. Musolino, A., "FEM/MOM formulation for the analysis of current distribution in rail launchers", 2004 12th Symposium on Electromagnetic Launch Technology, art. no. E-05, pp. 363-368, 2004.

43. Barmada, S., Musolino, A., Raugi, M., Rizzo, R., "Numerical simulation of a complete generator-rail launch system", 2004 12th Symposium on Electromagnetic Launch Technology, art. no. E-01, pp. 344-349, 2004.
44. Musolino, A., "Finite-element method/method of moments formulation for the analysis of current distribution in rail launchers," IEEE Transactions on Magnetics 41 (1 II), pp. 387-392, 2005.
45. Barmada, S., Musolino, A., Raugi, M., Rizzo, R., "Numerical simulation of a complete generator-rail launch system," IEEE Transactions on Magnetics 41 (1 II), pp. 369-374, 2005.
46. Nagy, Ş., Kollár, M., "Electromagnetic and thermal phenomena in the controlled phase transformation melting process ," Journal of Electrical Engineering 57 (1), pp. 36-41, 2006.
47. Sergeant, P., Dupré, L., "Circuit method for conductive and nonlinear ferromagnetic materials", IEEE Transactions on Magnetics 44 (6), art. no. 4526997, pp. 1326-1329, 2008.
48. Rubinacci, G. Tamburrino, A. Ventre, S., „An Efficient Numerical Model For a Magnetic Core Eddy-Current Probe", IEEE Transactions on Magnetics, June 2008, Volume: 44 , Issue: 6, On page(s): 1306 - 1309.

- **Albanese, R., Hantila, F.I., Rubinacci, G., "A nonlinear eddy current integral formulation in terms of a two-component current density vector potential," IEEE Transactions on Magnetics 32 (3 PART 2), pp. 784-787, 1996.**

Cited by:

49. Albanese, R., Rubinacci, G., Tamburrino, A., Villone, F., "Phenomenological approaches based on an integral formulation for forward and inverse problems in eddy current testing", International Journal of Applied Electromagnetics and Mechanics 12 (3-4), pp. 115-137, 2000.
50. Mihalache O, Preda G, Uchimoto T, Demachi K, Miya K, "Crack reconstruction in ferromagnetic materials using nonlinear FEM-BEM scheme and neural networks", 6th International Workshop Electromagnetic Nondestructive Evaluation (ENDE), Jun 28-30, 2000 Budapest, Hungary, Electromagnetic Nondestructive Evaluation (V) Book Series: Studies In Applied Electromagnetics And Mechanics, Vol. 21, pp. 67-74, 2001.
51. Ioan, D., Rebican, M., "Numerical model for eddy-current testing of ferromagnetic steel parts", IEEE Transactions on Magnetics 38 (2 I), pp. 629-632, 2002.
52. Bottauscio, O., Chiampi, M., Ragusa, C., "Transient analysis of hysteretic field problems using fixed point technique", IEEE Transactions on Magnetics 39 (3 I), pp. 1179-1182, 2003.
53. Fresa, R., Rubinacci, G., Ventre, S., "An eddy current integral formulation on parallel computer systems," International Journal for Numerical Methods in Engineering 62 (9), pp. 1127-1147, 2005.
54. Bermúdez, A., López, C., Rodríguez, R., Salgado, P., "A finite element method for the eddy current problem in terms of the current density. Application to nondestructive testing", 2007 International Conference on Electromagnetics in Advanced Applications, ICEAA'07, art. no. 4387291, pp. 277-280, 2007.
55. Rubinacci, G., Tamburrino, A., Ventre, S., "An efficient numerical model for a magnetic core eddy-current probe", IEEE Transactions on Magnetics 44 (6), art. no. 4526987, pp. 1306-1309, 2008.
56. Albanese R, Artaserse G, Bellizio T, et al., „Coupling plasmas and 3D passive structures in the JET tokamak", International Journal of Applied Electromagnetics and Mechanics, Volume: 33, Issue: 1-2, Pages: 533-540, 2010.
57. F . Calvano, G. Dal Mut, F. Ferraioli, A. Formisano, F. Marignetti, R. Martone, G. Rubinacci, A. Tamburrino, S. Ventre, "A novel technique based on integral formulation to treat the motion in the analysis of electric machinery", *International Journal of Applied Electromagnetics and Mechanics*, ISSN 1383-5416, vol. 39, no. 1-4, 2012, pp. 637-643.
58. S. Bogdan, N. Stefan, M.-V. Claudiu, "Aspects of numerical modeling of the induction heating process of non-ferromagnetic parts", *Journal of Electrical and Electronics Engineering*, vol. 5, no. 1 , 2012, pp. 229-232.
59. A. Quercia, R. Fresa, J.E. Contributors, "Ex-Vessel magnetic measurements in JET: A critical assessment of the collar probe", *Fusion Science and Technology*, vol. 61, no. 4, 2012, pp. 257-274.

- **Hantila, Florea, "Method for solving nonlinear resistive networks," Revue roumaine de sciences techniques. Serie electrotechnique et energetique 24 (2), pp. 217-226, 1979.**

Cited by:

60. Iordache, M., Dumitriu, L., "Efficient decomposition techniques for symbolic analysis of large-scale analog circuits by state variable method," Analog Integrated Circuits and Signal Processing 40 (3), pp. 235-253, 2004.

- **Ciric, I.R., Hantila, F.I., "An efficient harmonic method for solving nonlinear time-periodic eddy-current problems," IEEE Transactions on Magnetics 38 Volume 43, Issue 4, April 2007, Pages 1185-1188**.

Cited by:

61. Fujita, H., Ishibashi, K., "Nonlinear eddy current analysis of thin steel plate by boundary integral equations", IEEE Transactions on Magnetics 44 (6), art. no. 4526869, pp. 758-761, 2008.
62. Ishibashi, K.; Andjelic, Z.; Pusch, D., "Nonlinear Eddy Current Analysis by BEM Utilizing Adaptive Equation Technique", , IEEE Transactions on Magnetics 45 (3), pp. 1020-1023, March 2009.
63. Ishibashi K , "Nonlinear eddy current analysis by line integral equations utilizing integral formulas of electromagnetic fields", COMPEL-THE INTERNATIONAL JOURNAL FOR COMPUTATION AND MATHEMATICS IN ELECTRICAL AND ELECTRONIC ENGINEERING, Volume: 28, Issue: 1, Pages: 43-56, 2009.
64. Ishibashi K, Andjelic Z, Pusch D , „Nonlinear Eddy Current Analysis by BEM Minimum Order Formulation", IEEE TRANSACTIONS ON MAGNETICS Volume: 46 Issue: 8 Pages: 3085-3088 AUG 2010.
65. Ishibashi K, Andjelic Z, Pusch D, „Nonlinear eddy current analysis by BEM for thin plate employing simple iterative approach", INTERNATIONAL JOURNAL OF APPLIED ELECTROMAGNETICS AND MECHANICS Volume: 33 Issue: 1-2 Pages: 361-367, 2010.
66. Koczka Gergely, Biro Oszkar, „Fixed-point method for solving non linear periodic eddy current problems with T, phi-phi formulation", COMPEL-THE INTERNATIONAL JOURNAL FOR COMPUTATION AND MATHEMATICS IN ELECTRICAL AND ELECTRONIC ENGINEERING Volume: 29 Issue: 6 Pages: 1444-1452, 2010.
67. Biro Oszkar, Koczka Gergely, Preis Kurt, „Fast Time-Domain Finite Element Analysis of 3-D Nonlinear Time-Periodic Eddy Current Problems With T, Phi - Phi Formulation ", IEEE TRANSACTIONS ON MAGNETICS Volume: 47 Issue: 5 Pages: 1170-1173 MAY 2011.
68. Ishibashi Kazuhisa, Andjelic Zoran, Pusch David, „Nonlinear Eddy Current Analysis by Boundary Integral Equation of One Component Utilizing Impedance Boundary Condition ", IEEE TRANSACTIONS ON MAGNETICS Volume: 47 Issue: 5 Pages: 1398-1401 MAY 2011.
69. Zhao, Xiaojun; Li, Lin; Lu, Junwei; et al., "Analysis of the saturated electromagnetic devices under DC bias condition by the decomposed harmonic balance finite element method", COMPEL-THE INTERNATIONAL JOURNAL FOR COMPUTATION AND MATHEMATICS IN ELECTRICAL AND ELECTRONIC ENGINEERING Volume: 31 Issue: 2 Pages: 498-513 DOI: 10.1108/03321641211200554 Published: 2012.

- **F. Hantila, A method for solving nonlinear resistive networks, Rev. Roum. Sci. Techn., Électrotechn. et Energ., 24, 2, 1979.**

Cited by:

70. Fluerasu C, Fluerau C, "About some useful properties of cad-s for simulation of electrical circuits", Revue Roumaine Des Sciences Techniques-Serie Electrotechnique Et Energetique, Volume: 54 Issue: 1 Pages: 47-56 Published: JAN-MAR 2009.

- **Hantila, F., Spinei, F., "On the solutions existence in nonlinear electrical resistive networks", Revue roumaine de sciences techniques. Serie electrotechnique et energetique 25 (2), pp. 225-234, 1980.**

Cited by:

71. Andrei, H., Spinei, F., Cepisca, C., Caciula, I., Andrei, P.C., "The systematic analysis of the absorbed power in D.C. networks with modifiable parameters using a new mathematic algorithm", 2008 IEEE International Conference on Automation, Quality and Testing, Robotics, AQTR 2008 - THETA 16th Edition - Proceedings 2, art. no. 4588806, pp. 121-124, 2008.
72. Andrei, H., Spinei, F., Caciula, I., Andrei, P.C., "Systematic analysis of the electric power and magnetic energy for linear electric and magnetic circuits with modifiable parameters", IEEE EUROCON 2009, EUROCON 2009, 18-23 May 2009, art. no. 5167630, pp. 197-204, 2009.

- **Cranganu-Cretu, B., Hantila, F.I., Preda, G., Chen, Z., Miya, K., "Direct computation of static difference magnetic field in nonlinear magnetic materials and application to shape reconstruction of damaged areas in aging materials," Compumag-Evian, Evian, France, July 2-5, 2001.**

Cited by:

73. Miya, K., "Recent advancement of electromagnetic nondestructive inspection technology in Japan," IEEE Transactions on Magnetics 38 (2 I), pp. 321-326, 2002.

- **Hantila, F.I., Preda, G., Vasiliu, M., "Polarization method for static fields," Proc. of COMPUMAG'Sappro, 1999, pp. 664-665.**

Cited by:

74. Chen, Z., Preda, G., Mihalache, O., Miya, K., "A fast forward analysis scheme for nonlinear static electromagnetic problems," International Journal of Applied Electromagnetics and Mechanics 14 (1-4 SPEC.), pp. 513-520, 2001.

✦ **Maghiar, T., Leuca, T., Hantila, F.I., "Numerical Analysis of Eddy Current Heating", Editura Universitatii din Oradea, Oradea. (in Romanian), 2001.**

Cited by:

75. Nagy, Ş., Kollár, M., "Electromagnetic and thermal phenomena in the controlled phase transformation melting process," Journal of Electrical Engineering 57 (1), pp. 36-41, 2006.

✦ **Hantila F., "A method for solving 3-D eddy current problems in nonlinear media," Revue Roumaine des Sciences Techniques-Electrotechnique et Electroenergetique, 37, pp. 267-281, 1992.**

Cited by:

76. Peterson, W. , "Numerical solution of eddy current problems in ferromagnetic bodies travelling in a transverse magnetic field," International Journal for Numerical Methods in Engineering 58 (12), pp. 1749-1764, 2003.
77. Bogdan Dumitru Vărăticeanu, Mihai Maricaru, George-Marian Vasilescu, Marius Aurel Costea, "Eddy current integral formulation for electromagnetic field and forces computation in domains with permanent magnets, nonlinear media and moving bodies", *Rev. Roum. Sci. Techn, serie Electrotechn. et Energ.*, ISSN 0035-4066, Vol. 57, No.2, 2012, pp. 134-143.
78. George-Marian Vasilescu, Mihai Maricaru, Bogdan Dumitru Vărăticeanu, Marius Aurel Costea, "An efficient integral method for the computation of the bodies motion in electromagnetic field", *Rev. Roum. Sci. Techn, serie Electrotechn. et Energ.*, ISSN 0035-4066, Vol. 57, No.2, 2012, pp. 144-153.

✦ **Hănţilă F.I., Grama G., "An overrelaxation method for the computation of fixed point of a contractive mapping,"Rev. Roum. Sci. Techn. - Électrotechn. et Énerg., 27 (4), pp. 395-398, 1982.**

Cited by:

79. Munteanu, I., Drobny, S., Weiland, T., Ioan, D., "Triangle search method for nonlinear electromagnetic field computation," COMPEL - The International Journal for Computation and Mathematics in Electrical and Electronic Engineering 20 (2), pp. 417-430, 2001.
80. Dlala, E.; Belahcen, A.; Arkkio, A., „Locally Convergent Fixed-Point Method for Solving Time-Stepping Nonlinear Field Problems", IEEE Transactions on Magnetics, Volume 43, Issue 11, Nov. 2007 Page(s):3969 - 3975

✦ **Maghiar T., Nagy S., Hantila I.F., Nagy A., "The evolution of the hardening surface in the controlled casting process," The 10th International IGTE Symposium on Numerical Field Calculation in Electrical Engineering, pp. 290-294, 2002.**

Cited by:

81. Nagy, Ş., Kollár, M., "Electromagnetic and thermal phenomena in the controlled phase transformation melting process ," Journal of Electrical Engineering 57 (1), pp. 36-41, 2006.

✦ **Hantila I.F., "A method of solving stationary magnetic field in non-linear media," Revue Roumaine des Sciences Techniques, 20 (3), pp. 397-407, 1975.**

Cited by:

82. Munteanu, I., Drobny, S., Weiland, T., Ioan, D., "Triangle search method for nonlinear electromagnetic field computation," COMPEL - The International Journal for Computation and Mathematics in Electrical and Electronic Engineering 20 (2), pp. 417-430, 2001.
83. Saitz, J., "Magnetic field analysis of electric machines taking ferromagnetic hysteresis into account," Acta Polytechnica Scandinavica, Electrical Engineering (107), 2001.
84. Munteanu, I., Ciobotaru, C., Ioan, D., "Reducing the complexity order of the algorithms for magnetic field problems field nonlinear problems," COMPEL - The International Journal for Computation and Mathematics in Electrical and Electronic Engineering 21 (2), pp. 286-295, 2002.
85. Zhang, S., Zhong, T., Xu, Y., Shi, G., "Magnetic field analysis of electromagnetic valve taking hysteresis into account," Chinese Journal of Mechanical Engineering (English Edition) 16 (3), pp. 245-247, 2003.
86. Peterson, W. , "Fixed-point technique in computing nonlinear eddy current problems," COMPEL - The International Journal for Computation and Mathematics in Electrical and Electronic Engineering 22 (2), pp. 231-252, 2003.

87. Albanese, R., Rubinacci, G., Villone, F., "Electromagnetic analysis of the 3-D effects of the metallic structures in JET tokamak ," IEEE Transactions on Magnetics 40 (2 II), pp. 589-592, 2004.
88. Barbisio, E., Bottauscio, O., Chiampi, M., Ragusa, C., "Analysis of AC magnetic properties in SiFe laminations under DC-biased magnetisation," Physica B: Condensed Matter 343 (1-4), pp. 127-131, 2004.
89. Bottauscio, O., Chiampi, M., Manzin, A., Zucca, M., "Prediction of losses in induction machines: A challenge for the modelling approaches ," EPJ Applied Physics 30 (1), pp. 7-16, 2005.
90. Clemens, M., "Large systems of equations in a discrete electromagnetism: Formulations and numerical algorithms," IEE Proceedings: Science, Measurement and Technology 152 (2), pp. 50-72, 2005.
91. Dlala, E., Saitz, J., Arkkio, A., "Inverted and forward Preisach models for numerical analysis of electromagnetic field problems," IEEE Transactions on Magnetics 42 (8), art. no. 1661938, pp. 1963-1973, 2006.
92. Ifrim, C., "Nonlinear diffusion of magnetic fields in conductive, ferromagnetic media ," International Journal of Applied Electromagnetics and Mechanics 25 (1-4), pp. 735-741, 2007.
93. Zhai, Y., Vu-Quoc, L., "Analysis of power magnetic components with nonlinear static hysteresis: Proper orthogonal decomposition and model reduction ," IEEE Transactions on Magnetics 43 (5), pp. 1888-1897, 2007.
94. Kuczmann, M., "Numerical analysis of a 2D vector hysteresis measurement system ," Pollack Periodica 2 (1), pp. 17-26, 2007
95. Dlala, E.; Belahcen, A.; Arkkio, A., „Locally Convergent Fixed-Point Method for Solving Time-Stepping Nonlinear Field Problems", IEEE Transactions on Magnetics, Volume 43, Issue 11, Nov. 2007 Page(s):3969 – 3975.
96. Dlala, E., Arkkio, A., "Analysis of the convergence of the fixed-point method used for solving nonlinear rotational magnetic field problems ," IEEE Transactions on Magnetics 44 (4), art. no. 4475329, pp. 473-478, 2008.
97. Kuczmann, M., "Design of 2D rrsst system by FEM with T, φ-φ Potential formulation ," Pollack Periodica 3 (1), pp. 67-80, 2008.
98. Kuczmann, M., "Simulation of a vector hysteresis measurement system taking hysteresis into account by the vector Preisach model ," Physica B: Condensed Matter 403 (2-3), pp. 433-436, 2008.
99. Bottauscio, O., Chiampi, M., Manzin, A., "Modeling analysis of the electromagnetic braking action on rotating solid cylinders ," Applied Mathematical Modelling 32 (1), pp. 12-27, 2008.
100. Ludvig, T., Kuczmann, M., "Design of active magnetic bearing," Journal of Optoelectronics and Advanced Materials 10 (7), pp. 1834-1836, 2008.
101. Kuczmann, M., "Analysis of a vector hysteresis measurement system" Journal of Optoelectronics and Advanced Materials 10 (7), pp. 1823-1827, 2008.
102. Dlala, E., Belahcen, A., Arkkio, A., "A fast fixed-point method for solving magnetic field problems in media of hysteresis," IEEE Transactions on Magnetics 44 (6), art. no. 4526849, pp. 1214-1217, 2008.
103. Dániel Marcsa, Miklós Kuczmann, "Eddy current analysis with nonlinearity", Pollack Periodica, Volume 3, Number 2/August, pp. 97-109, 2008, ISSN 1788-1994 (Print) 1788-3911 (Online).
104. Miklós Kuczmann, "Design of 2D rrsst system by FEM with *T, Φ-Φ* potential formulation", Pollack Periodica, Volume 3, Number 1/April 2008, ISSN 1788-1994 (Print) 1788-3911 (Online).
105. Zhang Shengchang, ZhongTingxiu, XuYangzeng, ShiGuanglin, "Magnetic field analysis of electromagnetic valve taking hysteresis into account", Chinese Journal of Mechanical Engineering, Vo1 (restul este scris in chineză)
106. Oriano Bottauscio, Mario Chiampi and Alessandra Manzin, „Modeling analysis of the electromagnetic braking action on rotating solid cylinders", Applied Mathematical Modelling Volume 32, Issue 1, January 2008, Pages 12-27
107. Chwastek, K., Szczygłowski, J., Wilczynski, W., Marion, R., Raulet, M.-A., Zitouni, Y., Krähenbühl, L., "Modelling minor hysteresis loops of high silicon steel using the modified Jiles-Atherton approach", Przeglad Elektrotechniczny 85 (1), pp. 68-70, 2009.
108. Kovács, G., Kuczmann, M., "Simulation of a developed magnetic flux leakage method", Pollack Periodica 4 (2), pp. 45-56, 2009.
109. Bogdan Dumitru Vărăticeanu, Mihai Maricaru, George-Marian Vasilescu, Marius Aurel Costea, "Eddy current integral formulation for electromagnetic field and forces computation in domains with permanent magnets, nonlinear media and moving bodies", *Rev. Roum. Sci. Techn, serie Electrotechn. et Energ.*, ISSN 0035-4066, Vol. 57, No.2, 2012, pp. 134-143.
110. K. Chwastek, "The applications of fixed-point theorem in optimisation problems", *Archives of Electrical Engineering*, vol. 61, no. 2, 2012, pp. 189-198.

- **Hantila F.I., "Mathematical models of the relation between B and H non-linear media,"Rev. Roum. Sci. Techn. - Électrotechn. et Énerg., 19 (3), pp. 429-448, 1974.**

Cited by:

111. Canova, A., Repetto, M., "Integral solution of nonlinear magnetostatic field problems," IEEE Transactions on Magnetics 37 (3), pp. 1070-1077, 2001.
112. Munteanu, I., Drobny, S., Weiland, T., Ioan, D., "Triangle search method for nonlinear electromagnetic field computation," COMPEL - The International Journal for Computation and Mathematics in Electrical and Electronic Engineering 20 (2), pp. 417-430, 2001.
113. Saitz, J., "Magnetic field analysis of electric machines taking ferromagnetic hysteresis into account," Acta Polytechnica Scandinavica, Electrical Engineering (107), 2001
114. Szabó, Zs., Füzi, J., Iványi, A., "Magnetic force computation with hysteresis," COMPEL - The International Journal for Computation and Mathematics in Electrical and Electronic Engineering 24 (3), pp. 1013-1022, 2005.
115. Dlala, E.; Belahcen, A.; Arkkio, A., „Locally Convergent Fixed-Point Method for Solving Time-Stepping Nonlinear Field Problems", IEEE Transactions on Magnetics, Volume 43, Issue 11, Nov. 2007 Page(s):3969 – 3975.
116. Dlala, E., Arkkio, A., "Analysis of the convergence of the fixed-point method used for solving nonlinear rotational magnetic field problems," IEEE Transactions on Magnetics 44 (4), art. no. 4475329, pp. 473-478, 2008.
117. Kovács, G., Kuczmann, M., "Nonlinear finite element simulation for magnetic flux leakage tester", Pollack Periodica 3 (1), pp. 81-90, 2008.
118. Ifrim, C., "Nonlinear diffusion of magnetic fields in conductive, ferromagnetic media ," International Journal of Applied Electromagnetics and Mechanics 25 (1-4), pp. 735-741, 2007.
119. Außerhofer, S., Bíró, O., Preis, K., "A strategy to improve the convergence of the fixed-point method for nonlinear eddy current problems," IEEE Transactions on Magnetics 44 (6), art. no. 4526792, pp. 1282-1285, 2008.
120. Gergely Kovács, Miklós Kuczmann, "Nonlinear finite element simulation for magnetic flux leakage tester", Pollack Periodica, Volume 3, Number 1/April 2008, ISSN 1788-1994 (Print) 1788-3911 (Online)
121. Fluerasu C, Fluerasu C, "Time varying thermal field computation in materials with temperature depending properties", Revue Roumaine Des Sciences Techniques-Serie Electrotechnique Et Energetique, Volume: 53, Issue: 3, pp.: 269-278, Published: JUL-SEP 2008.
122. Kuczmann M ,"The polarization method combined with the Newton-Raphson technique in magnetostatic field problems", PRZEGLAD ELEKTROTECHNICZNY, Volume: 84, Issue: 12 pp. 198-201, Published: 2008.
123. Bogdan Dumitru Vărăticeanu, Mihai Maricaru, George-Marian Vasilescu, Marius Aurel Costea, "Eddy current integral formulation for electromagnetic field and forces computation in domains with permanent magnets, nonlinear media and moving bodies", Rev. Roum. Sci. Techn, serie Electrotechn. et Energ., ISSN 0035-4066, Vol. 57, No.2, 2012, pp. 134-143.
124. George-Marian Vasilescu, Mihai Maricaru, Bogdan Dumitru Vărăticeanu, Marius Aurel Costea, "An efficient integral method for the computation of the bodies motion in electromagnetic field", Rev. Roum. Sci. Techn, serie Electrotechn. et Energ., ISSN 0035-4066, Vol. 57, No.2, 2012, pp. 144-153.

- **F.Hantila, I.R.Ciric, "Magnetic Vector Potential Tree Edge Values for Boundary Elements", *IEEE Transaction on Magnetics* (ISI), no.3, vol.39, 2003, p.1183-1186;**

Cited by:

125. A. Moraru, "Improving the finite differences near a bevelled edge," Revue Roumaine Des Sciences Techniques-Serie Electrotechnique et Energetique, Volume: 53, Issue: 3, Pages: 261-268, JUL-SEP 2008.
126. Nagy, Ş., Leuca, T., Mich, C., "Numerical modeling of the coupled electromagnetic and thermal fields in the controlled solidification process", 2010, COMPEL - The International Journal for Computation and Mathematics in Electrical and Electronic Engineering 29 (5), pp. 1266-1275
127. Mihai Maricaru, Paul Minciunescu, Ioan R. Ciric, Marian Vasilescu, „A new vector boundary elements procedure for inductance computation" REVUE ROUMAINE DES SCIENCES TECHNIQUES-SERIE ELECTROTECHNIQUE ET ENERGETIQUE, Volume: 56, Issue: 2, Pages: 160-168, APR-JUN 2011.

- **F. Hantila et al., "The numeric computation of eddy currents" (in Romanian), *Edit. ICPE*, Bucharest, 2001,**

Cited by:

128. Leuca T, Arion MN, "About numerical analysis of electromagnetic and thermal field in induction equipment with moving bodies", Revue Roumaine Des Sciences Techniques-Serie Electrotechnique Et Energetique, Volume: 54, Issue: 3, Pages: 271-279, Published: JUL-SEP 2009.
129. Mihai Maricaru, Paul Minciunescu, Ioan R. Ciric, Marian Vasilescu, „A new vector boundary elements procedure for inductance computation" REVUE ROUMAINE DES SCIENCES TECHNIQUES-SERIE ELECTROTECHNIQUE ET ENERGETIQUE, Volume: 56, Issue: 2, Pages: 160-168, APR-JUN 2011.
130. A. Burca, G. Cheregi, "Numerical modeling of induction hardening system of gears", Journal of Electrical and Electronics Engineering, vol. 5, no. 1 , 2012 pp. 236-240.
131. Bogdan Dumitru Vărăticeanu, Mihai Maricaru, George-Marian Vasilescu, Marius Aurel Costea, "Eddy current integral formulation for electromagnetic field and forces computation in domains with permanent magnets, nonlinear media and moving bodies", Rev. Roum. Sci. Techn, serie Electrotechn. et Energ., ISSN 0035-4066, Vol. 57, No.2, 2012, pp. 134-143.

- **F.Hantila, M.Maricaru, Cl.Popescu, C.Ifrim, St.Ganatsios, "Performances of a Waste Recycling Separator with Permanent Magnets", in Journal of Materials Processing Technology, ISSN 0035-4066, Volume 181, Issues 1-3 , 1 January 2007, pp. 246-248.**

Cited by:

132. Kan A, Demirboga R , "A new technique of processing for waste-expanded polystyrene foams as aggregates", JOURNAL OF MATERIALS PROCESSING TECHNOLOGY, Volume: 209 Issue: 6, pp. 2994-3000, Published: MAR 19 2009.

- **I.Ciric, F.Hantila, and M.Maricaru "Novel Solution to Eddy-Current Heating of Ferromagnetic Bodies with Nonlinear B-H Characteristic Dependent on Temperature", Dig. Compumag Conf COMPUMAG 2007, (PB7-10), June 26, 2007, Aachen, Germany, p.621-622.**

Cited by:

133. Kurose, H., Miyagi, D., Takahashi, N., Uchida, N., Kawanaka, K. , "3-D Eddy current analysis of induction heating apparatus considering heat emission, heat conduction, and temperature dependence of magnetic characteristics", IEEE Transactions on Magnetics 45 (3), art. no. 4787355, pp. 1847-1850, 2009.

- **Ciric, I.R. Hantila, F.I. Maricaru, M., "Novel Solution to Eddy-Current Heating of Ferromagnetic Bodies With Nonlinear B-H Characteristic Dependent on Temperature", IEEE Trans. on Magn., Vol. 44, No. 6, Jun. 2008, pp. 1190-1193.**

Cited by:

134. Iatcheva I ., Stancheva R., Tahrilov H., Lilianova I., „Coupled Electromagnetic-Thermal Field Investigation In Induction Heating Device", MAGNETISM AND MAGNETIC MATERIALS Book Series: Solid State Phenomena Series , VOL. 152-153, PP. 407-410, 2009.
135. Kagimoto Hiroyuki; Miyagi Daisuke; Takahashi Norio; et al., „Effect of Temperature Dependence of Magnetic Properties on Heating Characteristics of Induction Heater", IEEE TRANSACTIONS ON MAGNETICS, Volume: 46, Issue: 8, Pages: 3018-3021, Published: AUG 2010

- **Hănţilă F.I., Demeter E, "The numerical solving of the electromagnetic field problem", (in Romanian), *Editura Ari Press*, Bucharest, 1995.**

Cited by:

136. Bandici, L., Leuca, T., Mich, C., Nagy, S., "Researches regarding the transfer phenomenon of the electromagnetic and thermal fields in a system", Proceedings of the 2008 International Conference on Electrical Machines, Electrical Machines, 18th International Conference on 6-9 Sept. 2008 Page(s):1 - 5 ICEM'08, art. no. 4800001, 2008.

- **F. I. Hantila, F. Constantinescu, A. G. Gheorghe, M. Nițescu, M. Maricaru, "A New Algorithm for Frequency Domain Analysis of Nonlinear Circuits", Rev. Roum. Sci. Techn, serie Electrotechn. et Energ., ISSN: 0035-4066, Vol. 54, No.1, 2009, pp. 57-66.**

Cited by:

137. Nemoianu IV, Cazacu "ESTUDY OF A DISC-SHAPED EARTH ELECTRODE INJECTING CURRENT INTO AN INHOMOGENEOUS SOIL", Author(s): Source: REVUE ROUMAINE DES SCIENCES TECHNIQUES-SERIE ELECTROTECHNIQUE ET ENERGETIQUE Volume: 55 Issue: 1 Pages: 23-31 Published: JAN-MAR 2010.
138. Claudiu Oros, Constantin Radoi, Adriana Florescu, "Comparison among computational intelligence methods for engine knock detection. Part 1", Rev. Roum. Sci. Techn, Serie Electrotechn. et Energ., ISSN 0035-4066, vol. 56, no. 4, 2011, pp. 418-427.

139. Iosif Vasile Nemoianu, Emil Cazacu, "Study of a disc-shaped earth electrode injecting current into an inhomogeneous soil", Rev. Roum. Sci. Techn, Serie Electrotechn. et Energ., ISSN 0035-4066, vol. 55, no. 1, 2010, pp. 23-31.

- **Hantila, F; Drosu, O; Maricaru, M, "Breast tumour detection using the numerical analysis of the thermal inverse problem", Author(s): Conference Information: 5th Japanese-Mediterranean Workshop on Applied Electromagnetic Engineering for Magnetic, Superconductiong and Nano Materials, Date: SEP 16-19, 2007 Larnaca CYPRUS, Source: JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS Volume: 10 Issue: 5 Pages: 1295-1298 Published: 2008**

Cited by:

140. Ciupitu L, Ivanescu AN, Chivescu S, et al. "VISION SYSTEM FOR HUMAN BODY INFRARED THERMOGRAPHY", Author(s):, Conference Information: 20th International Danube-Adria-Association-for-Automation-and-Manufacturing Symposium, NOV 25-28, 2009 Vienna, AUSTRIASource: ANNALS OF DAAAM FOR 2009 & PROCEEDINGS OF THE 20TH INTERNATIONAL DAAAM SYMPOSIUM Book Series: Annals of DAAAM and Proceedings Volume: 20 Pages: 1545-1546 Published: 2009.

- **Paper: F. Hantila, M. Maricaru, I. Hantila, "Procedura iterativă FEM-BEM, cu utilizarea potenţialului vector, pentru calculul câmpului electromagnetic în medii feromagnetice", National Symposium of Theoretical Electrical Engineering SNET'07 Conference Proceedings, Bucuresti, ISBN 978-973-718-899-1, pp. 388-393,**

Cited by:

141. Stefan Nagy, Teodor Leuca, Claudiu Mich, "Numerical modeling of the coupled electromagnetic and thermal fields in the controlled solidification process", COMPEL: The International Journal for Computation and Mathematics in Electrical and Electronic Engineering, ISSN 0332-1649, vol. 29, no. 5, 2010, pp. 1266-1275.

- **I.R. Ciric, F. I. Hantila, M. Maricaru, S. Marinescu, "Efficient Analysis of the Solidification of Moving Ferromagnetic Bodies With Eddy-Current Control", IEEE Transactions on Magnetics, ISSN 0018-9464, vol. 45, no. 3, 2009, pp. 1238-1241.,**

Cited by:

142. K. Uendo, T. Ando, "Theoretical study of induction pump for molten metal using rotating twisted magnetic field", IEEE Transactions on Magnetics, ISSN 0018-9464, vol. 48, no. 3, 2012, pp. 1200-1211.
143. Bogdan Dumitru Vărăticeanu, Mihai Maricaru, George-Marian Vasilescu, Marius Aurel Costea, "Eddy current integral formulation for electromagnetic field and forces computation in domains with permanent magnets, nonlinear media and moving bodies", Rev. Roum. Sci. Techn, serie Electrotechn. et Energ., ISSN 0035-4066, Vol. 57, No.2, 2012, pp. 134-143.

- **Calin Tiu, Florea I. Hantila, Oana Drosu, Mihai Maricaru, Adriana S. Nica, "Localizing a Breast Tumor with Thermographical Methods", SMIT Proceedings, ISBN 3-902087-25-0 (MITAT, Vol. 17, no. 4. pp. 209–245), 28 30 August 2008, Viena, Austria,**

Cited by:

144. N.A. Ivanescu, L. Ciupitu, "Vision system for human body infrared thermography", 2010 IEEE 19th International Workshop on Robotics in Alpe-Adria-Danube Region (RAAD), ISBN: 978-142446886-7, art. no. 5524559, pp.353-356, 24-26 June 2010, Budapest.

- **M. Maricaru, T. Maghiar, M. Silaghi, F. Hantila, "Scalar BEM for Magnetic Field Computation in Multiply Connected Domains", 11th International IGTE Symposium on Numerical Calculation in Electrical Engineering Proceedings, ISBN3-902465-07-7, Graz, pp. 74-78.,**

Cited by:

145. M.A. Silaghi, U.L. Rohde, "About some applications of microwave energy", Journal of Electrical and Electronics Engineering, ISSN 1844-6035, vol. 2, no. 1, 2009, pp. 91-95.

- **I.R. Ciric, F.I. Hantila, M. Maricaru, S. Marinescu, "Usage of Permanent Magnets in Reconstructing Flaws in Ferromagnetic Materials", The 9th Workshop on Optimization and Inverse Problems in Electromagnetism (OIPE 2006), Sorrento, Italy, Sept. 13-15, 2006, Conference Proceedings, ISBN 88 7146 733-7, pp. 249-250,**

Cited by:

146. M. Stanculescu, S. Marinescu, G. Cheregi, "Matlab in electrical engineering", Journal of Electrical and Electronics Engineering, ISSN 1844-6035, vol. 2, no. 2, pp. 95-98, 2009.

- **G. Preda, M. Rebican, F.I. Hantila, "Integral Formulation and Genetic Algorithms for Defects Geometry Reconstruction Using Pulse Eddy Currents," IEEE Transactions on Magnetics, ISSN 0018-9464, vol.46, no.8, Aug. 2010, pp. 3433-3436.**

Cited by:

147. Xie, Shejuan; Chen, Zhenmao; Takagi, Toshiyuki; et al., "Efficient Numerical Solver for Simulation of Pulsed Eddy-Current Testing Signals", IEEE TRANSACTIONS ON MAGNETICS Volume: 47 Issue: 11 Pages: 4582-4591 DOI: 10.1109/TMAG.2011.2151872 Published: NOV 2011.
148. A. Hamel, H. Mohellebi, M. Feliachi, "Imperialist competitive algorithm and particle swarm optimization comparison for eddy current non-destructive evaluation", Przeglad Elektrotechniczny, Vol. 88, No. 9A, 2012, pp. 285-289.
149. J. Albert, R. Banucu, V. Reinauer, C. Scheiblich, W.M Rucker, "Comparison of a direct and a vector potential integral equation method for the computation of eddy currents", IEEE Transactions on Magnetics, ISSN 0018-9464, vol. 48, no. 2, 2012, pp. 599-602.

- **Ioan Florea Hănţilă, Mihai Vasiliu, Augustin Moraru, Mihai Maricaru, "Utilizing the polarization method for solving a nonlinear magnetic shielding problem", Rev. Roum. Sci. Techn, serie Electrotechn. et Energ., ISSN: 0035-4066, Vol. 55, No.2, 2010, pp. 123-131.**

Cited by:

150. Marin Petre, Alexandru Mihail Morega, Marian Cilianu, "Electrothermal stress-strain in ancillary parts of an aluminum electrolysis cell", Rev. Roum. Sci. Techn, serie Electrotechn. et Energ.(ISI), ISSN: 0035-4066, Vol. 57, No.1, 2012, pp. 30-39.
151. A. Sotir, G. Gavrila, A. Balagiu, I. Datcu, A. Baciu, "Feedback electromagnetic field of a ship metal wall", Rev. Roum. Sci. Techn, serie Electrotechn. et Energ.(ISI), ISSN: 0035-4066, Vol. 58, No.1, 2013, pp. 3-13.

- **F. I. Hantila, I. R. Ciric, A. Moraru, M. Maricaru, "Modelling eddy currents in thin shields", COMPEL: The International Journal for Computation and Mathematics in Electrical and Electronic Engineering , ISSN: 0332-1649, vol.28, no.4, 2009, p. 963-972.**

Cited by:

152. Mihai Maricaru, Paul Minciunescu, Ioan R. Ciric, Marian Vasilescu, "A new vector boundary elements procedure for inductance computation", Rev. Roum. Sci. Techn, serie Electrotechn. et Energ., ISSN 0035-4066, vol. 56, no.2, 2011, pp. 160-168.

- **G. Preda, F.I. Hantila, M. Rebican, "Eddy current solver for nondestructive testing using an integral-FEM approach and zero-thickness flaw model", Proc. 13th Biennial IEEE Conf. Electromagnetic Field Computation, CEFC, 2008, , p. 98.,**

Cited by:

153. F. Wendler, U. Tröltzsch, O. Kanoun, "Modellierung der absoluten impedanz Einer Luftspule mit wirbelstromrückwirkung | [Modeling of the absolute impedance of Coreless Coils Under Eddy-Eurrent influence]", Technisches Messen, vol. 79, no. 1, 2012, pp. 516-521.

- **G. Preda, F. Hănţilă, "Integral equation for 3-D eddy current in moving bodies", Rev. Roum. Sci. Techn, serie Electrotechn. et Energ., ISSN 0035-4066, vol. 43, no. 3,1998 pp. 301–306,**

Cited by:

154. Bogdan Dumitru Vărăticeanu, Mihai Maricaru, George-Marian Vasilescu, Marius Aurel Costea, "Eddy current integral formulation for electromagnetic field and forces computation in domains with permanent magnets, nonlinear media and moving bodies", Rev. Roum. Sci. Techn, serie Electrotechn. et Energ., ISSN 0035-4066, Vol. 57, No.2, 2012, pp. 134-143.
155. George-Marian Vasilescu, Mihai Maricaru, Bogdan Dumitru Vărăticeanu, Marius Aurel Costea, "An efficient integral method for the computation of the bodies motion in electromagnetic field", Rev. Roum. Sci. Techn, serie Electrotechn. et Energ., ISSN 0035-4066, Vol. 57, No.2, 2012, pp. 144-153.

- **F.I. Hănţilă, I.R. Ciric , M. Maricaru, B. Vărăticeanu, L. Bandici, "A Dynamic Overrelaxation Procedure For Solving Nonlinear Periodic Field Problems", Rev. Roum. Sci. Techn, serie Electrotechn. et Energ., ISSN 0035-4066, vol. 56, no. 2, pp. 169-178, 2011 :**

Cited by:

156. George-Marian Vasilescu, Mihai Maricaru, Bogdan Dumitru Vărăticeanu, Marius Aurel Costea, "An efficient integral method for the computation of the bodies motion in electromagnetic field", Rev. Roum. Sci. Techn, serie Electrotechn. et Energ., ISSN 0035-4066, Vol. 57, No.2, 2012, pp. 144-153.

157. D. Micu, G. de Mey, “Green's function of potential problems in lens shaped geometries”, Rev. Roum. Sci. Techn, serie Electrotechn. et Energ., ISSN 0035-4066, Vol. 58, No.1, 2013, pp. 35-42.

- **F.I.Hantila, F. Constantinescu, A.G. Gheorghe, M. Nitescu, M. Maricaru, “A new algorithm for frequency domain analysis of nonlinear circuit”, Rev. Roum. Sci. Techn, serie Electrotechn. et Energ., ISSN 0035-4066, Vol. 57, No.2, 2012, pp. 134-143.,:**

Cited by:

158. P. Gagniuc, P.D. Paul Cristea, R. Tuduce, C. Ionescu-Tîrgovişte, L. Gavrilă, “DNA Patterns and evolutionary signatures obtained through kappa index of coincidence”, Rev. Roum. Sci. Techn, serie Electrotechn. et Energ., ISSN 0035-4066, Vol. 57, No.1, 2012, pp. 100-109.
159. C. Oros, C. Radoi, A. Florescu, “Comparison among computational intelligence methods for engine knock detection. Part 1”, Rev. Roum. Sci. Techn, Serie Electrotechn. et Energ., ISSN 0035-4066, vol. 56, no. 4, 2011, pp. 418-427.

- **I.F. Hantila, Bandici L., Leuca T., (2011) “Tehnici Informatice Utilizate in Ingineria Electrica”:**

Cited by:

160. C.O. Stasac, D.A. Hoble, “Analysis of inductive heating and current density in cylindrical pieces submitted cleating process at a frequency of 1500Hz”, Journal of Electrical and Electronics Engineering, vol. 5, no. 1, 2012, pp. 237-240.

- **F. I. Hănţilă, M. Maricaru, R.M. Ciuceanu, L. Corlan, “Harmonic analysis of circuits with nonlinear resistive elements”, Rev. Roum. Sci. Techn, serie Electrotechn. et Energ. (ISI), ISSN 0035-4066, Vol. 57, No.4, 2012, pp. 333-340:**

Cited by:

161. A. Florescu, S. Oprea, “High efficiency LLC resonant converter with digital control”, Rev. Roum. Sci. Techn, serie Electrotechn. et Energ., ISSN 0035-4066, Vol. 58, No.2, 2013, pp. 183-192.
162. D. Micu, G. de Mey, “The condition number for circulant networks”, Rev. Roum. Sci. Techn, serie Electrotechn. et Energ., ISSN 0035-4066, Vol. 58, No. 2, 2013, pp. 115-122.

- **M. Stănculescu, M. Maricaru, F.I. Hănţilă, S. Marinescu, L. Bandici, “An iterative finite element - boundary element method for efficient magnetic field computation in transformers”, Rev. Roum. Sci. Techn, serie Electrotechn. et Energ. (ISI), ISSN 0035-4066, vol. 56, no.3, 2011, pp. 267-276:**

Cited by:

163. D. Micu, G. de Mey, “Green's function of potential problems in lens shaped geometries”, Rev. Roum. Sci. Techn, serie Electrotechn. et Energ., ISSN 0035-4066, Vol. 58, No.1, 2013, pp. 35-42.

- **A. Moraru, M. Maricaru, I.R. Ciric, M. Vasiliu, I.F. Hănţilă, “Efficient field computation in structures with thin shields and magnetizable media”, Rev. Roum. Sci. Techn, serie Electrotechn. et Energ. (ISI), ISSN 0035-4066, vol. 56, no.2, 2011, pp. 121-130:**

Cited by:

164. L. Petrescu, A. Bordianu, V. Ionita, “Homogenization efficiency for composite materials in 2D magneto static exterior problems”, Rev. Roum. Sci. Techn, serie Electrotechn. et Energ., ISSN 0035-4066, Vol. 58, No.2, 2013, pp. 145-152.

- **F. I. Hantila, M. Maricaru, O. Drosu, S. Marinescu, “Eddy-current melting of ferromagnetic bodies”, Journal of Optoelectronics and Advanced Materials (ISI), ISSN 1454 4164, vol. 10, no. 5, May 2008, pp. 1208-1212:**

Cited by:

165. M. Arion, F.I. Hathazi, “The numerical computation of coupled problem for the electromagnetic and thermal field within the hardening processes of valve guides through electromagnetic induction”, Journal of Electrical and Electronics Engineering, ISSN 1844-6035, Vol. 5, Nr. 2, 2012, pp. 21-24.

- **I.R. Ciric, F.I. Hantila, M. Maricaru, “A new vector potential BEM for magnetic fields bounded by perfect conductors”, IEEE Transactions on Magnetics (ISI), ISSN 0018-9464, vol. 47, no. 5, 2011, pp. 1350-1353:**

Cited by:

166. J. Smeets, T. Overboom, J. Jansen, E. Lomonova, “3D analytical modeling technique of electromagnetic fields of air-cored coils surrounded by different ferromagnetic boundaries,", IEEE Transactions on Magnetics, ISSN 0018-9464, vol. PP, no. 99, 2013, pp. 1-11, Digital Object Identifier: 10.1109/TMAG.2013.2278528, ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=6579749&isnumber=4479871.

- **I.R. Ciric, F.I. Hantila, M. Maricaru, S. Marinescu, "Efficient iterative integral technique for computation of fields in electric machines with rotor eccentricity", IEEE Transactions on Magnetics (ISI), ISSN 0018 9464, vol. 48, no. 2, Feb. 2012, pp. 1015-1018:**

Cited by:

167. H. Torkaman, E. Afjei, "Sensorless method for eccentricity fault monitoring and diagnosis in switched reluctance machines based on stator voltage signature", IEEE Transactions on Magnetics, ISSN 0018 9464, vol.49, no.2, Feb. 2013, pp.912-920.
168. Z. Nasiri-Gheidari, H. Lesani, "New design solution for static eccentricity in single stator-single rotor axial flux induction motors", IET Electric Power Applications, ISSN 1751 8660, vol. 7, no. 6, 2013, pp. 523-534.

06.10.2013