

LISTA DE LUCRĂRI -
Profesor universitar dr. ing. IONIȚĂ Valentin

A – Teza de doctorat

Difuzia campului electromagnetic in medii cu histerezis (conducator: Prof.dr.doc.ing. C.I. Mocanu), Univ. Politehnica Bucuresti, 1994

B – Carti si capitole in carti

1. V.Ionita, H.Gavrila - *Metode experimentale in magnetism*, Editura Universitara Carol Davila, 356 pag., ISBN 973-7918-01-0, 2003;
2. V. Ionita - *Analiza numerica a dispozitivelor electromagnetice. Modelarea materialelor cu histerezis*, Editura MATRIX ROM, Bucuresti, 160 pag, ISBN 973-9254-69-1, 1998;
3. V. Ionita, V. Paltanea, G. Paltanea, L. Petrescu, G. Epureanu, A.D. Ionita – *Caracterizarea avansata a materialelor magnetice*, Ed. Politehnica Press, Bucuresti, 266 pag., ISBN 973-606-515-023-2, 2009 ;
4. H.Gavrila, H.Chiriac, P.Ciureanu, V.Ionita, A.Yelon – *Magnetism tehnic si aplicat*, Editura Academiei Romane, Bucuresti, 1188 pag, ISBN 973-27-0756-9, 2000;
5. V. Ionita - *Modelarea fenomenului de histerezis magnetic*, Litografia U.P.B., 108 pagini, 1998;
6. V.Ionita, O.Drosu, Fl.Enache – *Electrotehnica. Indrumar de laborator*, Editura Printech, Bucuresti, 186 pag., ISBN 973-652-373-X, 2001,;
7. V.Ionita, O.Drosu, Fl.Enache – *Electrotehnica. Caiet de laborator*, Editura Printech, Bucuresti, 102 pag., ISBN 973-652-409-4, 2001;

C – Lucrari indexate ISI/BDI

C1. Articole publicate in reviste cotate ISI

1. A.V. Zanfir, G. Voicu,S.I. Jinga, E. Vasile, V. Ionita - Low-temperature synthesis of BaTiO₃ nanopowders, *Ceramics Int.*, ISSN: 0272-8842, vol. 42, issue 1, part B, 2016, pp. 1672-1678, <http://dx.doi.org/10.1016/j.ceramint.2015.09.121> , WOS:000365367000085
2. V. Ionita, L. Petrescu, E. Cazacu – Effect of current harmonics on the hysteresis losses in soft magnetic materials, *Revue Roumaine des Sciences Techniques - Electrotechnique et Energetique*, ISSN 0035-4066, vol 60, nr. 4, 2015, p. 366-375, . WOS:000365935800003
3. L. Petrescu, E. Cazacu, V. Ionita – High frequencies losses prediction in soft magnetic materials, *Revue Roumaine des Sciences Techniques - Electrotechnique et Energetique*, ISSN 0035-4066, vol 60, nr. 1, 2015, p. 49-58. WOS:000350923900006
4. C.Covaliu, G.Paraschiv, S.Biris, I.Jitaru, E.Vasile, L.Diamandescu, T.C. Velickovic, M. Krstic, V.Ionita, H.Iovu, E. Matei – Maghemite and poly-DL-alanine based core–shell multifunctional nanohybrids for environmental protection and biomedicine applications, *Applied Surface Science*, ISSN 0169-4332, vol. 285P, 2013, pp. 86-95, <http://dx.doi.org/10.1016/j.apsusc.2013.08.059>, WOS: 000325960900012, Inspec Accession No.: 13832265.
5. E. Cazacu, V. Ionita, L. Petrescu - Transformer inrush current predetermination for distorted waveform voltage supply, *Revue Roumaine des Sciences Techniques - Electrotechnique et Energetique*, ISSN 0035-4066, vol 58, nr. 3, 2013, p.242-251, WOS: 000324447900002, Inspec Accession No.: 14386677.

6. V. Ionita, L. Petrescu, A. Bordianu, O. Tabara - Efficient use of Preisach hysteresis model in Computer Aided Design, *Advances in Electrical and Computer Engineering*, ISSN 1582-7445, vol. 13, no. 2, 2013, pp. 121-126, <http://dx.doi.org/10.4316/AECE.2013.02019>, WOS:000322179400019, Inspec Accession No.: 14082084
7. L. Petrescu, A. Bordianu, V. Ionita - Homogenization efficiency for composite materials in 2D magnetostatic exterior problems, *Revue Roumaine des Sciences Techniques - Electrotechnique et Energetique*, ISSN 0035-4066, vol 58, nr. 2, 2013, p.145-152, WOS:000320488100004, Inspec Accession No.: 14090241
8. C.Covaliu, I.Jitaru, G.Paraschiv, E.Vasile, S.Biris, L.Diamandescu, V.Ionita, H.Iovu – Core-shell hybrid nanomaterials based on CoFe₂O₄ particles coated with PVP or PEG biopolymers for applications in biomedicine, *Powder Technology*, ISSN 0032-5910, vol. 237, March 2013, pp. 415-426, <http://dx.doi.org/10.1016/j.powtec.2012.12.037>, WOS:000317256900049, Inspec Accession No.: 13820229
9. D.Ficai, E.Andronescu, A.Ficai, G.Voicu, B.Vasile, V.Ionita, C.Guran – Synthesis and characterization of mesoporous magnetite based nanoparticles, *Current Nanoscience*, ISSN 1573-4137, vol.8, no.6, 2012, pp. 875-879, <http://dx.doi.org/10.2174/157341312803989114>, WOS:000311285100010
10. V. Ionita, I. Covaliu, L. Petrescu, A. Bordianu, O. Tabara – Magnetic characterization of Fe₃O₄ nanoparticles used in biomaterials , *Revue Roumaine des Sciences Techniques - Electrotechnique et Energetique*, ISSN 0035-4066, vol 57, nr.2, 2012, p.154-161; WOS:000305202600005, Inspec Accession No.: 13418377
11. A. Bordianu, V. Ionita, L. Petrescu – Micro-scale numerical simulation of the magnetic recording, *Revue Roumaine des Sciences Techniques - Electrotechnique et Energetique*, ISSN 0035-4066, vol 57, nr.1, 2012, p.3-9; WOS:000303096800001, Inspec Accession No.: 13260202
12. C.Covaliu, D.Berger, C.Matei, L.Diamandescu, E.Vasile, C.Cristea, V.Ionita, H.Iovu - Magnetic nanoparticles coated with polysaccharide polymers for potential biomedical applications, *Journal of Nanoparticle Research, Special Issue: Nanostructured Materials*, vol 13, nr. 11, ISSN 1388-0764, p. 6169-6180, 2011, <http://dx.doi.org/10.1007/s11051-011-0452-6>, WOS:000297351600064, Inspec Accession No.: 13141702
13. V. Ionita, D. Ioan – Magnetic torque evaluation for magnetized nanoparticles, in *Materials Science Forum*, vol. 670 - *Applied Electromagnetic Engineering for Magnetic, Superconducting and Nanomaterials* (Eds. A.G. Mamalis, M. Enokizono, A. Kladas), ISSN 0255-5476, p. 103-109, 2011, <http://dx.doi.org/10.4028/www.scientific.net/MSF.670.103> ; WOS:000296800600014, Inspec Accession No.: 12265340
14. M. Rebican, R. Popa, G. Preda, V. Ionita – Numerical characterization model of vector hysteresis for magnetic materials, *Przeglad Elektrotechniczny (Electrical Review)*, ISSN 0033-2097, vol. 85, nr. 4, 2009, p. 219-222; WOS:000266133300058, Inspec Accession No.: 10657619
15. V.Ionita, L.Petrescu – Magnetic material characterization by open sample measurements, *Revue Roumaine des Sciences Techniques - Electrotechnique et Energetique*, ISSN 0035-4066, vol 54, nr.1, 2009, p.87-94; WOS:000264503000009, Inspec Accession No.: 10823397
16. V. Ionita, E. Cazacu – Correction of measured magnetization curves using finite element method, *IEEE Transactions on Magnetics*, ISSN 0018-9464, vol. 45, nr. 3, 2009, p.1174-1177, <http://dx.doi.org/10.1109/TMAG.2009.2012673> , WOS:000264019000058, Inspec Accession No.: 10499146

17. V.Ionita, E. Cazacu – Magnetic hysteresis modelling based on magneto-optical Kerr effect, *Revue Roumaine des Sciences Techniques - Electrotechnique et Energetique*, ISSN 0035-4066, vol 53, nr.4, 2008, p.455-462; WOS:000262136600010, Inspec Accession No.: 10650186
18. V.Ionita, A.D.Ionita – Arhitecture for integrating data obtained by advanced characterization of magnetic materials, *Rev. Rom. de Materiale - Romanian Journal of Materials*, ISSN 1583-3186, vol. 38, no. 1, 2008, pp. 69-75; WOS:000255032000008
19. V.Ionita, G.Epureanu, A.Patroi – Extraction of hysteresis model parameters from magneto-optical experiments, *Journal of Optoelectronics and Advanced Materials*, ISSN 1454-4164, vol.10, no.7, 2008, p.1814-1818, WOS:000257962300049
20. V. Ionita, B. Cranganu-Cretu – Experimental validation of electromagnetic field computation in magnetic materials, *IEEE Transactions on Magnetics*, ISSN 0018-9464, vol. 44, nr. 6, 2008, p.882-885, <http://dx.doi.org/10.1109/TMAG.2007.916363> , WOS:000258183400054, Inspec Accession No.: 10006972
21. V.Ionita, E.Cazacu – Identification of hysteresis Preisach model using magneto-optic microscopy, *Physica B – Condensed Matter*, ISSN 0921-4526, vol.403, no.2-3, 2008, pp.376-378, <http://dx.doi.org/10.1016/j.physb.2007.08.053> , WOS:000252913300037, Inspec Accession No.: 9741794
22. V.Ionita, L.Petrescu, A.Razicaneanu – Adjustable device for magnetic material investigation by Kerr microscopy, *International Journal of Applied Electromagnetics and Mechanics*, ISSN 1383-5416, vol. 25, no.1-4, 2007, p.199-203. WOS:000248151100033, Inspec Accession No.: 9685101
23. V.Ionita – Image enhancement in Kerr microscopy, *Journal of Optoelectronics and Advanced Materials*, ISSN 1454-4164, vol.9, no.4, 2007, p.1176-1179. WOS:000245834800080
24. V.Ionita, L.Petrescu – Numerical advanced characterisation of magnetic recording media, *Journal of Optoelectronics and Advanced Materials*, ISSN 1454-4164, vol.8, no.3, 2006, p.998-1000, WOS:000238506500020
25. A.Razicaneanu, V.Ionita, H.Gavrila – Numerical modelling of non-conventional shielding, *Journal of Optoelectronics and Advanced Materials*, ISSN 1454-4164, vol.6, no.3, 2004, p.1009-1012, WOS:000224105200045
26. V.Ionita, A.D.Ionita – Use of magnetic material models in electromagnetic CAD, *Journal of Optoelectronics and Advanced Materials*, ISSN 1454-4164, vol.6, no.3, 2004, p.1013-1016, WOS:000224105200046
27. A.D.Ionita, V.Ionita - Reducing electromagnetic noise in biomedical signals, *International Journal of Applied Electromagnetics and Mechanics*, ISSN 1383-5416, vol.19, no.1-4, IOS Press, 2004, p.179-182, WOS:000221724500034, Inspec Accession No.: 8234820
28. H.Gavrila, V.Ionita – Magnetic materials for advanced magnetic recording media, *Journal of Optoelectronics and Advanced Materials*, ISSN 1454-4164, vol.5, no.4, 2003, p.919-932, WOS:000185495600019
29. V.Ionita, B.Cranganu-Cretu, A.D.Ionita – Object-oriented software for advanced characterization of magnetic materials, *IEEE Transactions on Magnetics*, ISSN 0018-9464, vol. 38, nr. 2, 2002, p.1101-1104, <http://dx.doi.org/10.1109/20.996282> , WOS:000175086800197, Inspec Accession No.: 7265139
30. V.Ionita, H.Gavrila – Advanced characterization of hysteretic materials by object-oriented software, *Journal of Magnetism and Magnetic Materials*, ISSN 0304-8853, no.242-245, 2002, p.1234-1235, [http://dx.doi.org/10.1016/S0304-8853\(01\)01201-X](http://dx.doi.org/10.1016/S0304-8853(01)01201-X) , WOS:000176868900173

31. H.Gavrila, V.Ionita – Crystalline and amorphous soft magnetic materials and their applications – status of art and challenges, *Journal of Optoelectronics and Advanced Materials*, ISSN 1454-4164, vol.4, no.2, 2002, p.173-192, WOS:000176427400002
32. F. Ossart, V. Ionita - Convergence de la méthode du point fixe modifiee pour le calcul de champ magnétique avec hysteresis, *European Physical Journal - Applied Physics*, ISSN 1286-0042, nr.5, 1999, p.63-69, <http://dx.doi.org/10.1051/epjap:1999105>, WOS:000078949300008, Inspec Accession No.: 6278672
33. H. Gavrila, V. Ionita, W. Kappel - Magnetic thin film in the transient state due to an external step magnetic field, *Journal de Physique IV*, ISSN 1155-4339, vol.8, no.2, 1998, p.347-350, <http://dx.doi.org/10.1051/jp4:1998281>, WOS:000074526300081, Inspec Accession No.: 6001774
34. V. Ionita, G.Preda - Evaluation of magnetic material losses produced by hysteresis and eddy currents, *IEEE Transactions on Magnetics*, ISSN 0018-9464, vol. 34, nr. 5, 1998, p.2633-2635, <http://dx.doi.org/10.1109/20.717609>, WOS:000075960200056, Inspec Accession No.: 6043613
35. V. Ionita, B. Cranganu, D. Ioan - Quasi-stationary magnetic field computation in hysteretic media, *IEEE Transactions on Magnetics*, ISSN 0018-9464, vol. 32, nr. 3, 1996, p.1128-1131, <http://dx.doi.org/10.1109/20.497441>, WOS:A1996UL32000125, Inspec Accession No.: 5288247

C2. Articole publicate in alte reviste indexate in baze internationale BDI

1. C. Stancu, P.V. Notinger, V. Ionita, V. Marinescu, D. Panaitescu – Structure and properties of Polyethylene-based magnetic composites, *Annals of the Univ. of Craiova, Electrical Eng. series*, ISSN 1842-4805, no. 38, 2014, pp. 98-106.
2. Adelina Bordianu, V. Ionita – Micro-scale modelling of the composite material magnetization, *UPB Sci. Bull, Series C*, ISSN 1454-234x, vol.75, iss. 1, 2013, pp. 267-280, Inspec Accession No.: 13793491
3. Samoilescu, V. Ionita – Micromagnetic simulation of technical magnetization, *Journal of Advanced Research in Physics*, ISSN 2067-0451 (printed) 2069-7201 (online), vol. 1, no. 2, 2010.
4. A.R. Samoilescu, V. Ionita – The analysis of a magnetization device using FEMM, *Scientific Bulletin of Naval Academy*, Ed. Academiei Navale “Mircea cel Batran”, Constanta, 2009, ISSN 1454-864X, vol. XII, pp. 201-204.
5. V. Ionita, E. Cazacu – Correction of magnetic measurements in open magnetic circuits, *Journal of Optoelectronics and Advanced Materials - Symposia*, ISSN 2066-057X (print), 2066-0596 (on-line), vol.1, no.5, 2009, p.817-820;
6. V.Ionita, R.Pietraru – Parallel numerical implementation of a vector hysteresis model, *Revue Roumaine des Sciences Techniques - Electrotechnique et Energetique*, ISSN 0035-4066, vol 50, nr.2, Editura Academiei, Bucuresti, 2005, p.191-197, Inspec Accession No.: 8679187;
7. H.Gavrila, V.Ionita – Materiaux pour les milieux d'enregistrement magnetique, *Revue Roumaine des Sciences Techniques - Electrotechnique et Energetique*, vol 49, nr.2, ISSN 0035-4066, Editura Academiei, Bucuresti, 2004, p.177-196, Google Scholar;
8. A.D.Ionita, V.Ionita – Software treatment of electromagnetic interferences, *Revue Roumaine des Sciences Techniques - Electrotechnique et Energetique*, ISSN 0035-4066, vol 48, nr.2-3, Editura Academiei, Bucuresti, 2003, p.441-446, Google Scholar;
9. V. Ionita, P. Alotto - Magnetic field computation in media with hysteresis, *Revue Roumaine des Sciences Techniques - Electrotechnique et Energetique*, ISSN 0035-4066, vol 41, nr.3, Editura Academiei, Bucuresti, 1996, p.291-296, Google Scholar;

10. V. Ionita - Magnetic field iterative calculus in nonlinear and hysteretic media, *UPB Sci. Bull, Series C*, ISSN 1454-234x, vol.57-58, nr.1-4, 1995-1996, p.179-184;
11. V. Ionita - Influence of the boundary conditions on the convergence rate in the iterative numerical computation of the nonlinear field problems, *Revue Roumaine des Sciences Techniques - Electrotechnique et Energetique*, ISSN 0035-4066, vol 38, nr.2, Editura Academiei, Bucuresti, 1993, p.181-188, Inspec Accession No.: 4673108;
12. V. Ionita - A study of a linear iterative method convergence for the magnetic field computation into a strong nonlinear medium, *Revue Roumaine des Sciences Techniques - Electrotechnique et Energetique*, vol 38, nr.3, Editura Academiei, Bucuresti, ISSN 0035-4066, 1993, p.339-348, Inspec Accession No.: 4735201;
13. V. Ionita - Some procedures for improving the iterative methods convergence in nonlinear magnetic field computation, *Revue Roumaine des Sciences Techniques - Electrotechnique et Energetique*, ISSN 0035-4066, vol 38, nr.4, Editura Academiei, Bucuresti, 1993, p.529-538, Inspec Accession No.: 4739958;
14. V. Ionita - An iterative method for the quasistationary magnetic field calculation of nonlinear magnetic materials with hysteresis, *Revue Roumaine des Sciences Techniques - Electrotechnique et Energetique*, ISSN 0035-4066, vol 36, nr.3, Editura Academiei, Bucuresti, 1991, p.291-298; Inspec Accession No.: 4177810
15. V. Ionita - A study on the magnetization of magnetic materials with hysteresis, *Revue Roumaine des Sciences Techniques - Electrotechnique et Energetique*, ISSN 0035-4066, vol 36, nr.4, Editura Academiei, Bucuresti, 1991, p.399-408, Inspec Accession No.: 4177817;
16. V. Ionita - CAD codes adaptation for electromagnetic devices with hysteretic materials / Adaptarea programelor CAD pentru dispozitivele electromagnetice ce contin materiale cu histerezis, *Electrotehnica, Electronica si Automatica. Electrotehnica*, ISSN 0376-4745, vol. 45, nr. 9-10, Bucuresti, 1997, p. 17-19, Inspec Accession No.: 5934902;
17. V. Ionita - The magnetic field calculating in permanent magnets devices / Calculul campului magnetic in dispozitive cu magneti permanenti, *Electrotehnica, Electronica si Automatica. Electrotehnica*, ISSN 0376-4745, vol. 42, nr. 3-4, Bucuresti, 1994, p.18-23, Inspec Accession No.: 5115152;
18. V. Ionita - Modelling of the hysteresis in magnetic field problems / Modelarea histerezisului in probleme de camp magnetic, *Electrotehnica, Electronica si Automatica. Electrotehnica*, ISSN 0376-4745, vol. 42, nr. 7, Bucuresti, 1994, p.17-20, ; Inspec Accession No.: 5115161
19. V. Ionita - Electromagnetic field penetration into hysteresis media / Patrunderea campului electromagnetic in medii cu histerezis, *Electrotehnica, Electronica si Automatica. Electrotehnica*, ISSN 0376-4745, vol.37, nr. 2, Bucuresti, 1989, p.66-71; Inspec Accession No.: 3455528

C3. Articole publicate in volumele unor manifestari stiintifice cotate ISI

1. E. Cazacu, **V. Ionita**, L. Petrescu – Numerical and experimental investigations on the energizing of miniature iron core transformers, *Proc. of 9-th Int. Symp. on Advanced Topics in Electrical Engineering (ATEE'2015)*, Bucuresti, mai 2015, ISBN 978-1-4799-7514-3, p. 170-175, <http://dx.doi.org/10.1109/ATEE.2015.7133759> ; WOS:000368159800030 Inspec Accession No.: 15240927
2. A. Bordianu, L. Petrescu, **V. Ionita** – Numerical testing of homogenization formulas efficiency for magnetic composite materials, *Journal of Physics: Conference Series*, online ISSN: 1742-6596, print ISSN: 1742-6588, vol. 585, 2015, 012003,

<http://dx.doi.org/10.1088/1742-6596/585/1/012003>, WOS:000352196800003 Inspec Accession No.: 14948481

3. C. Stancu, P.V. Notinger, **V. Ionita**, V. Marinescu, D. Panaitescu - Polyethylene-based magnetic composites, *Proc. of Int. Conf. on Applied and Theoretical Electricity (ICATE 2014)*, Craiova, oct. 2014, pp. 1-7, ISBN 978-1-4799-4161-2, ISSN 2376-4163, <http://dx.doi.org/10.1109/ICATE.2014.6972596>, WOS:000352737400008 Inspec Accession No.: 14791573
4. V. Ionita, Adelina Bordianu – Magnetic losses estimation for non sinusoidal current supply, *Proc. of 8-th Int. Symp. on Advanced Topics in Electrical Engineering (ATEE'2013)*, Bucuresti, mai 2013, ISBN 978-1-4673-5978-8, Print ISBN 978-1-4673-5979-5, Bucuresti, mai 2013, p. 11-14, <http://dx.doi.org/10.1109/ATEE.2013.6563375> ; WOS:000332928500029, Inspec Accession No.: 13778553
5. E. Cazacu, **V. Ionita**, L. Petrescu – An improved method for the inrush current evaluation in single phase power transformers, *Proc. of 8-th Int. Symp. on Advanced Topics in Electrical Engineering (ATEE'2013)*, Bucuresti, mai 2013, ISBN 978-1-4673-5978-8, Print ISBN 978-1-4673-5979-5, Bucuresti, mai 2013, p. 11-14, <http://dx.doi.org/10.1109/ATEE.2013.6563390>; WOS:000332928500044, Inspec Accession No.: 13778453
6. V.Ionita, C.Covaliu – Magnetic experimental investigation of ferrite nanoparticles used in hybrid biomaterials, *Proc. of 7-th Int. Symp. on Advanced Topics in Electrical Engineering (ATEE'2011)*, IEEE Xplore, INSPEC no. 12118911, ISSN 2068-7966, Print ISBN 978-1-4577-0507-6, Bucuresti, mai 2011, p. 11-14 ; WOS:000310701200007, Inspec Accession No.: 12118911
7. V. Ionita, E. Cazacu – Educational software for the numerical correction of experimental magnetization curves, *Proc. of 3rd Int. Symp. On Electrical and Electronics Engineering (ISEEE-2010)*, Galati, sept. 2010, IEEE Xplore, <http://dx.doi.org/10.1109/ISEEE.2010.5628515> , ISBN 978-1-4244-8407-2, 2010, pp. 193-196 ; WOS:000304591700033, Inspec Accession No.: 11651327
8. V.Ionita, L.Petrescu – Computational errors in hysteresis Preisach modelling, in *Mathematics in Industry*, vol.11 (*Scientific Computing in Electrical Engineering*), Eds. G. Ciuprina, D. Ioan, pp. 317-322, Springer Verlag, Berlin, ISBN 978-3-540-71979-3, 2007; WOS:000250107700034
9. F.Ossart, V.Ionita - Influence of the head anisotropy on magnetic recording performances, in *Studies in Applied Electromagnetics and Mechanics*, vol. 13 (*Non-Linear Electromagnetic Systems – Advanced Techniques and Mathematical methods*), Eds.: V.Kose, J.Sievert, p.570-573, IOS Press, Amsterdam, ISBN 90-5199-381-1 , 1998, WOS:000075187800133

C4. Articole publicate in volumele unor manifestari stiintifice BDI

1. L.Petrescu, E. Cazacu, **V. Ionita**, C. Petrescu - Characterization of soft magnetic materials in a wide range of frequencies, *Int. Symp. on Fundamental of Electrical Eng. (ISFEE 2014)*, Bucuresti, nov. 2014, Print ISBN 978-1-4799-6820-6, pp. 1-6, <http://dx.doi.org/10.1109/ISFEE.2014.7050630> , Inspec Accession No.: 14949276
2. V. Ionita - Computation of non-sinusoidal hysteresis losses using standardized measured data, *Int. Symp. on Fundamental of Electrical Eng. (ISFEE 2014)*, Bucuresti, nov. 2014, ISBN 978-1-4799-6820-6, pp. 1-4, <http://dx.doi.org/10.1109/ISFEE.2014.7050610> , Inspec Accession No.: 14949281

3. E. Cazacu, L. Petrescu, **V. Ionita**, –Inrush current investigation for single phase power transformers by means of magnetic material core characteristics, *Proc. of Int. Symp. on Theoretical Electrical Engineering (ISTET 2013)*, Pilsen (Czech Republic), iunie 2013, ISBN 978-80-261-0246-5, p. I-37-38, Google Scholar;
4. V.Ionita, A.D.Ionita – Model-based software for integrated magnetic material laboratory, *Proceedings of XIII Int. Symp. on Electromagnetic Fields in Mechatronics, Electric and Electronic Eng. (ISEF 2007)*, Praga) - Book of Digests, ISBN 978-80-01-03784-3, 2007, pp. 261-262, Google Scholar
5. A.D.Ionita, V.Ionita – Interoperation between software tools for electromagnetic problems involving materials with hysteresis, *Proceedings of 2nd Conf. on Advances and Applications of GiD (GiD 2004)*, ISBN 84-95999-48-X, Barcelona (Spania), feb. 2004, p.147-150, Google Scholar;
6. M. Rebican, R.C. Popa, G. Preda, V. Ionita, L. Petrescu – Numerical characterization method for magnetic materials with vector hysteresis, *Simp. Nat. de Electrotehnica Teoretica SNET 2008*, Conference Proceedings (ISBN 978-606-521-045-5), 2008, pp. 444-449, Google Scholar;

D – Lucrari publicate in reviste si volume de conferinte cu referenti (neindexate)

1. V. Ionita, B. Cranganu - Calculul iterativ al campului magnetic in medii neliniare si cu histerezis, *Electrotehnica, Electronica si Automatica. Electrotehnica*, vol. 44, nr. 5-6, Bucuresti, 1996, p.22-25;
2. B. Cranganu, V. Ionita - Estimarea erorii in cadrul metodei elementelor finite, *Electrotehnica, Electronica si Automatica. Electrotehnica*, vol. 44, nr.7-8, Bucuresti, 1996, p.26-29;
3. I.-C. Covaliu, I. Jitaru, E. Vasile, O. Oprea, L. Diamandescu, **V. Ionita**, C. Cristea, H. Iovu - Synthesis and characterization of gamma-Fe₂O₃ –poly-L-alanine core-shell hybrid as potential therapeutic agent, *European Symposium on Biomaterials and Related Areas (Euro BioMat)*, Jena, Germania, prezentare orală B-140, aprilie 2011, p. 22;
4. A.Samoilescu, V.Ionita – Simulation of technical magnetization, *Proceedings of 14th Int. IGTE Symp. on Numerical Field Calculation in Electrical Eng.*, ISBN 978-3-85125-133-3, Graz (Austria), sept. 2010, pp. 442-447;
5. V. Ionita, E. Cazacu – Computer aided correction of the experimental magnetization curves, *Joint Mmde-IEEE ROMSC Int. Conf.*, Iasi, iunie 2010, P19.
6. A. Samoilescu, V. Ionita – Micromagnetic simulation of technical magnetization, *Joint Mmde-IEEE ROMSC Int. Conf.*, Iasi, iunie 2010, P32.
7. A.R. Samoilescu, V. Ionita – The analysis of a magnetization device using FEMM, The 21st Int. Conf. NAV-MAR-EDU 2009, Constanta, nov. 2009, Ed. Academiei Navale “Mircea cel Batran”, ISSN 1843-6749, pp. 13-19.
8. A.R. Samoilescu, V. Ionita – 3D numerical simulation of a magnetizer based on Bitter coil, The 21st Int. Conf. NAV-MAR-EDU 2009, Constanta, nov. 2009, Ed. Academiei Navale “Mircea cel Batran”, ISSN 1843-6749, pp. 20-28.
9. V. Ionita, E. Cazacu – Educational software for the numerical correction of experimental magnetization curves, *Proc. of 17th Conf. on the Computation of Electromagnetic Fields (COMPUMAG-2009)*, Florianopolis (Brazilia), nov. 2009, pp. 855-856.
10. V. Ionita, M. Rebican – Numerical design of an experimental device for vectorial magnetic measurements, *Proc. of XX Symp. Electromagnetic Phenomena in Nonlinear Circuits* (EPNC 2008, Lille), ISBN 978-83-921340-5-3, 2008, pp. 81-82;

11. M. Rebican, R. Popa, G. Preda, V. Ionita, – Numerical characterization model of vector hysteresis for magnetic materials, *Proc. of XX Symp. Electromagnetic Phenomena in Nonlinear Circuits* (EPNC 2008, Lille), ISBN 978-83-921340-5-3, 2008, pp. 91-92;
12. V. Ionita, E. Cazacu – Correction of magnetic measurements in open magnetic circuits, *Proc. of Joint Int. Conf. “Materials for Electrical Engineering”*, Bucuresti, ISBN 978-606-521-028-8, iunie 2008, p.36-41;
13. V. Ionita, E. Cazacu – Correction of measured magnetization curves using finite element method, *Proceedings of 13-th Biennial IEEE Conf. on Electromagnetic Field Computation (CEFC 2008, Atena)* – PB3-2, 2008, pp. 119;
14. M. Rebican, R. Popa, G. Preda, V. Ionita, L. Petrescu, E. Patroiu – Numerical model of vector hysteresis for magnetic materials, *Proceedings of 13-th Biennial IEEE Conf. on Electromagnetic Field Computation (CEFC 2008, Atena)* – PC5-2, 2008, pp. 275;
15. V.Ionita, E.Cazacu – Magnetic hysteresis modeling based on MOKE, *Proc. of 5th Conf. “New Research Trends in Material Science”* (ARM-5, Sibiu), 2007, pp. 674-677;
16. V.Ionita, A.D.Ionita – Integrated laboratory for advanced characterization of magnetic materials, *Proc. of 5th Conf. “New Research Trends in Material Science”* (ARM-5, Sibiu), 2007, pp. 656-659;
17. V. Ionita, B. Cranganu-Cretu, E.A. Patroiu, V. Galca – Experimental validation of electromagnetic field computation in highly non linear magnetic materials, *Proc. of 16th Conf. on the Computation of Electromagnetic Fields (COMPUMAG-2007)*, Aachen (Germania), iunie 2007, pp. 115-116.
18. V.Ionita, E.Cazacu – Identification of hysteresis Preisach model using magneto-optic microscopy, *Abstracts of 6th Int. Symp. on Hysteresis Modeling and Micromagnetics (HMM-2007)*, Napoli (Italia), iunie 2007, pp. 66;
19. L.Petrescu, V.Ionita – Experimental difficulties in hysteresis model identification, *Proc. of Joint International Conf. “Materials for Electrical Engineering” (MmdE-2006)*, ISBN 978-973-718-503-7, Bucuresti, iunie 2006, pp.91-94;
20. V.Ionita, L.Petrescu – Numerical and experimental errors in classical Preisach modelling, *Book of abstracts and programme, III^rd Joint European Magnetic Symposia (JEMS-06)*, San Sebastian (Spania), iunie 2006, pp.63;
21. V.Ionita, L.Petrescu – Data processing in Preisach model identification, *Proceedings of 12th Int. IGTE Symp. on Numerical Field Calculation in Electrical Eng.*, ISBN 978-3-902465-56-6, Graz (Austria), sept. 2006, pp.87-90;
22. V.Ionita, L.Petrescu, A.Razicaneanu – Magnetic material investigation by Kerr microscopy, *Proceedings of 12th Interdisciplinary Electromagnetic, Mechanic & Biomedical Problems (ISEM)*, ISBN 3-902105-00-1, Bad Gastein (Austria), sept. 2005, p. 88-89;
23. V.Ionita, L.Petrescu – Computational errors in hysteresis Preisach modelling, *Book of Abstracts, 6th Int. Conf. on Scientific Computing in Electrical Eng. (SCEE-2006)*, ISBN 978-973-718-520-4, Sinaia, sept.2006, pp.36;
24. A.Razicaneanu, V.Ionita, H.Gavrila – Numerical modelling of non-conventional shielding, *Proc. of 4th International Workshop on “Materials for Electrotechnics”*, ISBN 973-718-006-2, Bucuresti, mai 2004, p.85-88;
25. V.Ionita, A.D.Ionita – Use of magnetic material models in electromagnetic CAD, *Proc. of 4th International Workshop on “Materials for Electrotechnics”*, ISBN 973-718-006-2, Bucuresti, mai 2004, p.7-10;
26. V.Ionita, L.Petrescu, G.Epureanu – Numerical difficulties of Preisach model identification, *Proc. of 4th International Workshop on “Materials for Electrotechnics”*, ISBN 973-718-006-2, Bucuresti, mai 2004, p.89-92;

27. A.D.Ionita, V.Ionita - Reducing electromagnetic noise in biomedical signals, *Proceedings of 11th International Symposium on Applied Electromagnetics & Mechanics (ISEM)*, Versailles (Franta), mai 2003, p. 232-233;
28. V.Ionita, A.Razicaneanu, H.Gavrila - Analysis of shielding efficiency for magnetic garnets, *Proceedings of 11th International Symposium on Applied Electromagnetics & Mechanics (ISEM)*, Versailles (Franta), mai 2003, p. 136-137;
29. V.Ionita – Integration of experimental and numerical data for hysteresis modelling, *Proceedings of the 3rd International Workshop "Materials for Electrotechnics"* (vol.I: "Experimental methods in magnetism", ISBN 973-652-361-6), Bucuresti, mai 2001, p.40-44;
30. V.Ionita, H.Gavrila – Experimental investigation of permanent magnet, *Proceedings of the 3rd International Workshop "Materials for Electrotechnics"* (vol.I: "Experimental methods in magnetism", ISBN 973-652-361-6), Bucuresti, mai 2001, p.117-120;
31. V.Ionita s.a. – Experimental study of magnetic recording media, *Proceedings of the 3rd International Workshop "Materials for Electrotechnics"* (vol.I: "Experimental methods in magnetism", ISBN 973-652-361-6), Bucuresti, mai 2001, p.121-124;
32. A.D.Ionita, V.Ionita, S.Lita – Educational software development for electromagnetics. An object-oriented approach, *Proceedings of 13th Int. Conf. on Control Systems and Computer Science (CSCS-13)* (ISBN 973-85237-1-0), Politehnica Press, Bucuresti, iunie 2001, p.485-490;
33. V.Ionita, H.Gavrila – Advanced characterization of hysteretic materials by object-oriented software, *Joint European Magnetic Symposia (JEMS'01) - Abstracts*, Grenoble (Franta), sept.2001, p.125;
34. V.Ionita, S.Lita, A.D.Ionita – Object-oriented software for advanced characterization of magnetic materials, *Record of Conf. on the Computation of Electromagnetic Fields COMPUMAG'01*, Evian-Lyon (Franta), iulie 2001, vol.II, p.224-225;
35. V.Ionita, H.Gavrila - Advanced tools for magnetic materials characterization, *Proceedings of 3rd Romanian-Japanese Joint Seminar on Applied Electromagnetics and Mechanics RIJSSEM'01*, Oradea, sept.2001, ISBN 973-613-060-6, p.89-92;
36. H.Gavrila, V.Ionita - Crystalline and amorphous soft magnetic materials and their applications – status of art and challenges, *Abstract Book of International Workshop on Amorphous and nanostructured magnetic materials (ANMM)*, I-01 (lucrare invitata), Iasi, sept.2001;
37. V.Ionita – Hysteresis modeling in electromagnetic field computation, *Int.Sem. on Electromagnetic Nondestructive Evaluation of Welded Ferromagnetic Parts*, Bucuresti, iulie 2000, p.12-18;
38. H.Gavrila, V.Ionita – Measuring system for the complete characterization of magnetic materials, *Int.Sem. on Electromagnetic Nondestructive Evaluation of Welded Ferromagnetic Parts*, Bucuresti, iulie 2000, p.22;
39. V.Ionita – Improvement of magnetic recording devices by CAD tools, *Symp. on Advanced Topics in Electrical Engineering ATEE'2000*, Bucuresti, dec.2000, p.53-58;
40. V. Ionita, F. Ossart - Etude de la convergence de la méthode du point fixe pour calculer le champ magnétique dans les matériaux hystéritiques, *Conf. Européene sur les méthodes numériques en électromagnétisme NUMELEC'97*, Lyon (Franta), apr. 1997, p. 50-51;
41. F. Ossart, V. Ionita - Some remarks about magnetic recording modeling, *Int. Symp. on Nonlinear Electromagnetic Systems ISEM'97*, Braunschweig (Germania), mai 1997, p. TPB2-31;
42. H. Gavrila, V. Ionita, W. Kappel - Aimantation transitoire des toles magnétiques, *Travaux du Premier Atelier Scient. Franco-Canadiano-Roumain "Matériaux pour l'Electrotechnique"*, Bucuresti, iunie 1997, p. 67-74;

43. V. Ionita, H. Gavrila - Calcul du champ dans les materiaux magnetiques non lineaires ou hysteretiques, *Travaux du Premier Atelier Scient. Franco-Canadiano-Roumain "Matériaux pour l'Electrotechnique"*, Bucuresti, iunie 1997, p. 84-88;
44. S. Lita, V. Ionita, G. Ionescu, H. Gavrila - Predermination numerique des pertes par hysteresis et par courants de Foucault dans les materiaux magnetiques, *Travaux du Premier Atelier Scient. Franco-Canadiano-Roumain "Matériaux pour l'Electrotechnique"*, Bucuresti, iunie 1997, p. 97-100;
45. V. Ionita, S. Lita - Evaluation of magnetic material losses produced by hysteresis and eddy currents, *Conf. on the Computation of Electromagnetic Fields COMPUMAG'97*, Rio de Janeiro (Brazilia), nov. 1997, p.651-652;
46. V. Ionita, S. Lita - Electromagnetic device simulation including hysteresis modelling, *Romanian-Japanese Joint Seminar on Applied Electromagnetics and Mechanics*, Neptun (Romania), Proceedings, sept. 1996, p. 7;
47. V. Ionita, A. Marcu - Vector hysteresis modelling by a Stoner-Wohlfarth type model, *Romanian-Japanese Joint Seminar on Applied Electromagnetics and Mechanics*, Neptun (Romania), Proceedings, sept. 1996, p. 8;
48. V. Ionita, M. Platon - A systemic approach of the coupled phenomena in electromagnetics, *10th Int. Conf. on Control Systems and Computer Science CSCS-10*, Bucuresti, mai 1995, p. 145-153;
49. V. Ionita, B. Cranganu, D. Ioan - Quasi-stationary magnetic field computation in hysteretic media, *Conf. on the Computation of Electromagnetic Fields COMPUMAG'95*, Berlin (Germania), Conference Record, iulie 1995, p.366-367;
50. V. Ionita, D. Ioan - Hysteresis modelling in CAD for electromagnetic field problems, *Int. Symp. on Nonlinear Electromagnetic Systems ISEM'95*, Cardiff (Tara Galilor), Conference Abstracts, sept. 1995, p. D-05;
51. P. Alotto, P. Molfino, V. Ionita, B. Cranganu - Modelling of 2-D magnetic field in media with hysteresis, *Int. Symp. on Nonlinear Electromagnetic Systems ISEM'95*, Cardiff (Tara Galilor), Conference Abstracts, 1995, p. D-06;
52. M.Chiampi, D. Chiarabaglio, V. Ionita - Nonlinear field solutions through the fixed-point method, *Proceedings of 12th IASTED Int. Conf. "Modelling, Identification and Control"*, Innsbruck (Austria), ACTA Press, Zurich, 1993, p.87-90;
53. L. Petrescu, A. Bordianu, V. Ionita - Efficiency of 2D homogenization formulas for magnetic nanocomposite materials, *Simp. Nat. de Electrotehnica Teoretica SNET 2012, Conference Proceedings*, ISSN 2067-4147, 2012, pp. 270-275;
54. V.Ionita – Magnetic material modeling based on microscopic measurements, *Simp. Nat. de Electrotehnica Teoretica SNET 2007*, Conference Proceedings (ISBN 978-973-718-899-1), 2007, pp.23-28 ;
55. V.Ionita, L.Petrescu – Preisach modeling accuracy for magnetic recording materials, *Simp. Nat. de Electrotehnica Teoretica SNET'05*, Conference Proceedings (ISBN 973-618-268-5), 2005, pp.45-48 ;
56. V.Ionita, R.Pietraru – Parallel numerical implementation of vector hysteresis model, *Simp. Nat. de Electrotehnica Teoretica SNET'04*, Conference Proceedings (ISBN 973-718-096-8), 2004, pp.580-586;
57. A.Razicaneanu, V.Ionita, H.Gavrila – Methods for reducing ship's magnetic signature, *Simp. Nat. de Electrotehnica Teoretica SNET'04*, Conference Proceedings (ISBN 973-718-096-8), 2004, pp.65-71;
58. V.Ionita, R.Pietraru – Parallel modeling of magnetic materials with hysteresis, *Advanced Topics in Electrical Engineering ATEE'04*, Conference Proceedings, 2004, pp.7-10;
59. H.Gavrila, V.Ionita – Materials for advanced magnetic recording media, *Romanian Conference on Advanced Materials (ROCAM)*, Constanta, 2003, p.289;

60. H.Gavrila, V.Ionita – Magnetic recording media today, *National Conference on New Research Trends in Material Science (ARM-3)*, Constanta, sept. 2003, p.80;
61. V. Ionita - Inregistrarea magnetica a informatiei - de la experiment la simulare numERICA, *Seminarul National de Electrotehnica Teoretica*, Univ. "Politehnica" Bucuresti, mai 1997;
62. A. Moraru, C. Atanasiu, V. Ionita - O modelare a suprafetelor de flux constant utila la studiul echilibrului plasmei in TOKAMAK, *Sesiunea de Bazele Electrotehnicii*, Cat. Electrotehnica, Univ. "Politehnica" Bucuresti, mai 1995, p.71-78;

E – Brevete

1. H. Gavrila, Gh. Mihaiescu, S. Nicolaie, V. Ionita, M.D. Marin, E. Macamete, W. Kappel - *Masina electrica dublu excitata*, brevet nr. 125881 / 29.07.2011, OSIM, 2011.

F – Contracte

F1. Proiecte internationale - coautor

1. D.Ioan, V.Ionita si altii - *Nature-inspired micro-fluidic manipulation using artificial cilia*, contract FP6, coord. Philips Electronics (Eindhoven–Olanda), no. NMP4-CT-2006-033274, 2006-2010
2. H.Gavrila, V.Ionita si altii – *Nanostructured and amorphous magnetic alloys for high-frequency applications*, Executive Prog. of Scientific and Technological Cooperation between Italy and Romania, contract nr.4, 2005-2007
3. H.Gavrila, V.Ionita si altii – *MAGNAT- Cercetari fundamentale in domeniul modelarii fizice si matematice, al calculului si realizarii unor dispozitive magnetice*, grant major de cercetare CNCSIS 3/2C, contract nr. 39731/1998 (MEN) sau 9265/1998 (UPB), 1999-2001;
4. H.Gavrila, V.Ionita si altii – *PU-MAGNAT- Program de pregatire postuniversitara - studii aprofundate si doctorat, in domeniul magnetismului aplicat si tehnici*, grant CNCSIS 76/4D, contract 40625, 2000-2001.

F2. Proiecte nationale - director

1. *Modelări și simulări privind comportarea în regim dinamic a materialelor magnetice cu proprietăți controlate*, grant CNCSIS tip A-Consortiu, contract 6GR/2006, 2006-2008 (coordonare colectiv UPB - partener);
2. *Dezvoltarea unor modele experimentale și numerice de caracterizare a materialelor magnetice cu histerezis*, contract CEEX 78/2006, 2006-2008 (coordonare colectiv UPB - partener);
3. *Materiale magnetice cu performanțe superioare utilizate în construcția mașinilor electrice*, contract CEEX 215/2006, 2006-2008 (coordonare colectiv UPB - partener);
4. *Studiul prin microscopie magneto-optica a proceselor de micro- și nano-magnetizare din materialele magnetice*, grant CNCSIS, A-362, 2005-2007;
5. *Metoda experimentală pentru studiul materialelor cu proprietăți magnetice prin efect magneto-optic Kerr*, contract CEEX 33/2005, 2005-2008 (coordonare colectiv UPB - partener);
6. *Analiza configurațiilor statice și dinamice de magnetizare în materialele magnetice prin efect magneto-optic Kerr*, contract PNCDI – proiect CERES nr. 4-135/2004, 2004-2006;

7. *Instalatie de conversie energetica neconventionala de mica putere, bazata pe integrarea unor materiale avansate si solutii tehnologice noi*, contract PNCDI – RELANSIN nr. 1804/2003, 2003-2005 (coordonare colectiv UPB - partener);
8. *Caracterizarea vectoriala a materialelor magnetice in calculul de inalta performanta al campului electromagnetic*, grant CNCSIS, A-480, 2002-2004;
9. *Metode avansate de caracterizare a materialelor magnetice cu histerezis*, grant CNCSIS (Consiliul National al Cercetarii Stiintifice din Invatamantul Superior), contracte 37124/2000 (AT-201) si 34967/2001 (AT-10), 2000-2001;
10. *Biblioteca informatica de materiale magnetice cu histerezis pentru calculul de inalta performanta a dispozitivelor electromagneticice*, grant ANSTI/MEC, contract nr.6111/2000, tema B-38 / A-36, 2000-2001;

F3. Proiecte nationale - coautor

1. H.Gavrila, V.Ionita si altii - *Mașini electrice cu eficiență sporită, prin utilizarea unor soluții tehnice avansate, bazate pe predeterminarea proprietăților magnetice ale tolelor*, contract CNDI-UEFISCDI PCCA Tip 2 nr. 32/2012, 2012-2016
2. H.Gavrila, V.Ionita si altii - *Sistem micro-electro-mecanic cu aplicații în reconstrucția microchirurgicală a nervilor periferici (RECONNECT)*, contract PC 72-160/1.10.2008, 2008-2011, coordonator: INCD pentru Microtehnologie.
3. H.Gavrila, V.Ionita si altii - *Biochip microfluidic pentru caracterizarea reologică a fluidelor biologice ne-newtoniene cu aplicații în diagnoză și tratament medical (MELANOCHIP)*, contract PC 12-094/1.10.2008, 2008-2011, coordonator: INCD pentru Microtehnologie
4. H.Gavrila, V.Ionita si altii – *Sistem microfluidic integrat pentru analiza în vitro a fluidelor biologice cu aplicații în diagnoză și tratament medical*, contract CEEX 27/2005, 2005–2008
5. H.Gavrila, V.Ionita si altii - *Aprofundarea cunoștințelor de spintronica prin dezvoltarea fizicii compușilor Heusler ajustabili*, contract CEEX 69/2005, 2005–2008
6. H.Gavrila, V.Ionita si altii - *Cercetări fundamentale și aplicative în domeniul materialelor multi-funcționale nanostructurate*, grant CNCSIS tip A-Consorțiul, tema 1, cod CNCSIS 97, 2005-2007
7. H.Gavrila, V.Ionita, F.Hantila si altii – *Sistem de servicii pentru documentare, informare si transfer al informatiilor tehnice, economice, juridice, armonizate UE, in sectorul industrial*, contract PNCDI – proiect RELANSIN nr.1053/2004, 2004-2006;
8. H.Gavrila, V.Ionita, F.Hantila si altii – *Mijloace de protectie complexa la interferenta electromagneticica, pe nave militare*, contract PNCDI – proiect CERES nr.4-134/2004, 2004-2006;
9. H.Gavrila, V.Ionita, F.Hantila si altii – *Reducerea amprentei magnetice a navei militare in scopul protectiei impotriva campurilor de mine marine*, contract PNCDI – proiect CERES nr.3-101/2003, 2003-2005;
10. H.Gavrila, V.Ionita si altii – *Soluții de creștere a densității de înregistrare în sistemele de disc magnetic dur pentru înregistrarea magnetică a informației*, grant CNCSIS, A-15, 2003-2005;
11. H.Gavrila, V.Ionita, F.Hantila si altii – *Solutii noi de optimizare a ecranelor de protectie pentru radiatii electromagneticice neionizante in gama extinsa de frecventa 500 kHz-10 GHz*, contract PNCDI – proiect CERES nr. 64/2002, 2002-2004;

12. H.Gavrila, V.Ionita si altii – *Contributii la studiul mediilor particulate de inregistrare magnetica a informatiei*, grant ANSTI/CNCSIS, contract 6111/2000 (B-11), act ad.I/2001 (A-8) si 33784/2002 (A-184), 2000-2002;
13. H.Gavrila, V.Ionita si altii – *Metode avansate de calcul numeric al campului magnetic in medii neliniare si cu histerezis*, grant CNCSU, A-764, 1998-1999;
14. H.Gavrila, V.Ionita si altii - *Studiul unor metode de prevenire a posibilitatilor de inregistrare eronata, voita sau accidentală, a cartelelor magnetice de acces la metrou*, contract MCT nr. 836/1996 (B-71), act aditional 712/III/1997 (A-117) si act aditional 631/I/1998 (A-119), 1996-1998;
15. H.Gavrila, V.Ionita si altii - *Studii de fundamentare teoretica a proceselor de magnetizare in mediile de inregistrare magnetica a informatiei*, grant CNCSU (Consiliul National al Cercetarii Stiintifice Universitare), contracte 4001/1995 (B-75), 5001/1996 (B-277), 1995-1996;
16. H.Gavrila, V.Ionita si altii - *Studiul teoretic si realizarea practica a unor dispozitive de determinare a caracteristicilor magnetice ale materialelor, cu integrarea unor metode si tehnici moderne de proiectare*, contract MCT (Min. Cercetarii si Tehnologiei) nr. 510-B/1995 (B-30), 836/1996 (A-45) si 836/1997 (A-53) 1995-1997;

F4. Proiecte POSDRU

1. **Conducător de activitate doctorală** in „*Promovarea științei și calității în cercetare prin burse doctorale (PROSCIENCE)*”, proiect POSDRU nr. 187/1.5/S/155420, 2015, coordonator: Universitatea Politehnica din Bucuresti
2. **Conducător de activitate postdoctorală** in „*Exelență în cercetare prin burse doctorale și postdoctorale (ExcelDOC)*”, proiect POSDRU nr. 159/1.5/S/132397, 2014–2015, coordonator: Universitatea Politehnica din Bucuresti
3. **Expert termen scurt** in „*Dezvoltarea unui sistem operational al calificărilor din învățământul superior din România*”, proiect POSDRU nr. 2/1.2/S/2, 2009 – 2010, coordonator: Agenția Națională pentru Calificările din Învățământul Superior și Parteneriat cu Mediul Economic și Social (ACPART).
4. **Manager partener (fac. Inginerie Electrică- UPB), expert termen lung** in „*Program strategic pentru promovarea inovarii in servicii prin educatie deschisa, continua - INSEED*”, proiect POSDRU nr. 86/1.2/S/57748, 2010 – 2013, coordonator: Universitatea Politehnica din Bucuresti (prof. T. Borangiu).
5. **Expert termen lung – conducător de doctorat** in „*Dezvoltarea de cariere științifice competitive prin programe de burse doctorale (COMPETE)*”, proiect POSDRU nr. 88/1.5/S/60203, 2009 – 2012, coordonator: Universitatea Politehnica din Bucuresti (prof. E. Andronescu)
6. **Expert termen lung – conducător de doctorat** in „*Valorificarea capitalului uman din cercetare prin burse doctorale (ValueDoc)*”, proiect POSDRU nr. 107/1.5/S/76909, 2010 – 2013, coordonator: Universitatea Politehnica din Bucuresti (prof. E. Andronescu)