

## Anexa 2a

**Titlu proiect: Compozite magnetoelectrice cu proprietati emergente pentru aplicatii in comunicatii fara fir si senzori**

**Categoria de proiect: PN-II-PT-PCCA-2013-4-1119**

**Contractul de finanțare: 263/2014**

**Manager proiect: Prof. univ. Dr. Liliana Mitoseriu**

## Lista rezultate

Nr. crt.	NUME AUTORI	TITLUL ARTICOLULUI/ CĂRȚII / COMUNICĂRII ȘTIINȚIFICE	REVISTA / VOLUMUL/EDITURA IN CARE A APARUT / CONFERINȚA LA CARE S-A COMUNICAT	ANUL PUBLICA RII/ COMUNI CARI
<b>ARTICOLE ISI</b>				
1	Neagu Alexandra, Curecheriu Lavinia P., Airimioaei Mirela, Cazacu Ana, Cernescu Adrian, Mitoseriu Liliana	<b>Impedance spectroscopy characterization of relaxation mechanisms in gold-chitosan nanocomposites</b>	Composite Part B 71, 210-217 (2015)	2015
2	A. Sakanas, R. Grigalaitis, J. Banyš, L. Curecheriu, L. Mitoseriu, V. Buscaglia	<b>Microstructural influence on the broadband dielectric properties of BaTiO<sub>3</sub>- Ni<sub>0.5</sub>Zn<sub>0.5</sub>Fe<sub>2</sub>O<sub>4</sub> core-shell composites: experiment and modeling</b>	J. Appl. Phys. 118, 174106-8 (2015)	2015
3	R.E. Stanculescu, C.E. Ciomaga, N. Horchidan, C. Galassi, F.M. Tufescu, L. Mitoseriu	<b>The influence of post-sintering re- oxidation treatment on dielectric response of dense and porous Ba<sub>0.70</sub>Sr<sub>0.30</sub>TiO<sub>3</sub> ceramics</b>	Ceramics International 42, 527–536 (2016)	2016
4	C.E. Ciomaga, O.G. Avadanei, I. Dumitru, M. Airimioaei, S. Tascu, F. Tufescu, and L. Mitoseriu	<b>Engineering magnetoelectric composites towards application as tunable microwave filter</b>	J. Phys. D: Appl. Phys. 49, 125002 (9pp) (2016)	2016
5	N. Horchidan, C.E. Ciomaga, R.C. Frunza, C. Capiiani, C. Galassi, L. Mitoseriu	<b>A comparative study of hard/soft PZT-based ceramic composites</b>	Ceramics International 42, 9125–9132 (2016)	2016
6	G. Schileo, C. Pascual- Gonzalez, M. Alguero, I.M. Reaney, P. Postolache, L. Mitoseriu, K. Reichmann, A. Feteira	<b>Yttrium Iron Garnet/Barium Titanate Multiferroic Composites</b>	J. Am. Ceram. Soc., 99 [5] 1609–1614 (2016)	2016

7	L. Pădurariu, L.P. Curecheriu, L. Mitoseriu,	<b>Nonlinear dielectric properties of paraelectric -dielectric composites described by a 3D Finite Element Method based on Landau-Devonshire theory</b>	Acta Materialia 103, 724-734 (2016)	2016
8	A. Sakanas, D. Nuzhnyy, R. Grigalaitis, J. Banys, F. Borodavka, S. Kamba, C. E. Ciomaga, and L. Mitoseriu	<b>Dielectric and phonon spectroscopy of Nb-doped Pb(Zr1-yTiy)O3-CoFe2O4 composites</b>	JOURNAL OF APPLIED PHYSICS 121, 214101 (2017)	2017
9	M.V. Pop, N. Horchidan, A.C. Ianculescu, L. Mitoseriu	<b>Frequency mixing application based on BaTiO3 ceramic: Design and functional characterization</b>	INTERNATIONAL JOURNAL OF APPLIED CERAMIC TECHNOLOGY, 14, 4, 593-603 (2017)	2017
<b>ARTICOLE ALTE BAZE DE DATE</b>				
1				
n				
<b>CARTI</b>				
1	Cristina E. Ciomaga, Liliana Mitoseriu	<b>Cap. 21 Ferroelectric Perovskite-Spinel Ferrite Ceramics</b> , (26 pag), carte <i>Magnetic, Ferroelectric, and Multiferroic Metal Oxides</i>	Elsevier, ISBN 978-0-12-811180-2 (2017).	2017
n				
<b>DOCUMENTATIE TEHNICA, BREVETE</b>				
1	Cristina Elena Ciomaga, Mirela Airimioaei, Liliana Mitoseriu, Nicoleta Lupu	<b>Compozit magnetoelectric ceramic obținut prin procedeul de preparare in situ, cu proprietăți feromagnetice, magnetostrictive și permitivități de ordinul sutelor</b>	înregistrat OSIM A/00314 (2017)	2017
2	Florin Mihai Tufescu, Liliana Mitoseriu, Cristina Elena Ciomaga, Nicoleta Lupu, Mihai Valentin Pop, Florin Tufescu	<b>Senzor de câmp magnetic variabil cu structură magnetoelectrică stratificată din ceramică de Pb(Zr,Ti)O3 și microbenzi din Fe78Si9B13</b>	înregistrat OSIM A/00422 (2017)	2017
<b>COMUNICARI STIINTIFICE NATIONALE</b>				
1	V. Preutu, R. Stanculescu, M. Airimioaei, L. Mitoseriu, C. Ciomaga, S. Tascu, <i>Prepararea și investigarea proprietăților compozitelor bazate pe PCL și nanoparticule magnetice/feroelectrice</i> , Sesiunea de comunicari stiintifice studentesti FARPHYS 2014, Iasi, Romania (prezentare poster)			2014
2	V. Preutu, R. Stanculescu, M. Airimioaei, L. Mitoseriu, <i>Investigation of composites based on Poly-ε-caprolactone and magnetic/ferroelectric nanoparticles</i> , 10th International Conference on Physics of Advanced Materials, Iasi, Romania, 22 - 28 September 2014			2014
3	F. Gheorghiu, C. Ciomaga, M. Simenas, V. Kalendra, J. Banys, L. Mitoseriu, <i>Preparation, phase evolution and dielectric properties of BaTi1-xFexO3 diluted magnetic oxides ceramics</i> , IEEE ROMSC – XIII – June 14th, 2016 – IAȘI -ROMANIA (prezentare orală)			2016
4	A. Maftai, L. Curecheriu, M. Airimioaei, N. Horchidan, P. Postolache, C.E. Ciomaga, L. Mitoseriu, <i>Dielectric and magnetic properties of BZT-(Co,Zn) ferrite ceramic composites</i> , The 6th National Conference on Applied Physics, nov. 26 - 27, 2016, Iasi, Romania (prezentare poster)			2016
5	I. Turcan, L. Mitoseriu, J. Banys, <i>Study of functional properties of Fe2O3-BaTiO3 multiferroic ceramic composites</i> , The 6th National Conference on Applied Physics, nov. 26 - 27, 2016, Iasi, Romania (prezentare orală)			2016



6	A. Maftai, C.E. Ciomaga, L.P. Curecheriu, M. Airimioei, N. Horchidan, P. Postolache, L. Mitoseriu, <i>Studies on structural, electrical and magnetic behavior of Co-Zn ferrite and BaZr<sub>0.15</sub>Ti<sub>0.85</sub>O<sub>3</sub> ferroelectric ceramic composites</i> , Conferința tineri FarPhys 2016, 29 octombrie 2016, Iași, Romania (prezentare poster).			2016
<b>COMUNICARI ȘTIINȚIFICE INTERNAȚIONALE</b>				
1	C.E. Ciomaga, M. Airimioei, L. Padurariu and L. Mitoseriu,	<i>Preparation and functional properties of ferroelectric-ferrite composites: Experiment and modeling</i>	5th Management Committee Meeting (MCM5) and Meetings of Working COST Action IC1208, Bilkent University, 26-27 March 2015, Ankara, Turkey (oral).	2015
2	R. Grigalaitis, A. Sakanas, J. Banys, C. E. Ciomaga, L. Mitoseriu	<i>Broadband Dielectric Studies of Cobalt Ferrite and Nb-doped Lead Zirconium Titanate Multiferroic Composites</i>	Joint IEEE International Symposium on Applications of Ferroelectric (ISAF), International Symposium on Integrated Functionalities (ISIF), and Piezoresponse Force Microscopy Workshop (PFM) (ISAF-ISIFPFM 2015), 24-27 May 2015, Singapore (oral).	2015
3	C. E. Ciomaga, M. Airimioaei, P. Postolache and L. Mitoseriu	<i>Electric and magnetic properties of particulate ferrite-ferroelectric composites</i>	10th International Symposium on Hysteresis Modeling and Micromagnetics, 18-20 May 2015, Iasi, Romania (poster).	2015
4	N. Horchidan, L. Stoleriu, L. Padurariu, L. Mitoseriu	<i>FORC diagrams: a complementary method for ferroelectric materials characterization</i>	The International Symposium on Hysteresis Modeling and Micromagnetics (HMM), 18-20 Mai, Iasi, Romania, 2015 (poster).	2015
5	C.E. Ciomaga, L. Padurariu and L. Mitoseriu	<i>Ferroelectric-ferrite/CNT ceramic composites: synthesis, functional properties and modeling</i>	3rd Conference of The Serbian Society for Ceramic Materials, June 15-17, 2015, Belgrade, Serbia (invited).	2015
6	M. Airimioaei, C.E. Ciomaga and L. Mitoseriu	<i>Preparation and functional characterization of CoFe<sub>2</sub>O<sub>4</sub>-PbTiO<sub>3</sub> magnetoelectric composites</i>	14 <sup>th</sup> International Conference EUROPEAN CERAMIC SOCIETY, 21-25 June, 2015, Toledo, Spain (poster).	2015
7	R. Stanculescu, C.E. Ciomaga, L. Padurariu, N. Horchidan, C. Galassi and L. Mitoseriu	<i>Study of the role of Graphite-derived porosity on the BT-based materials functional properties</i>	13th European Meeting of Ferroelectricity, Porto, Portugal, 28 June - 3 July 2015 (oral).	2015
8	M. Airimioaei, C.E. Ciomaga and L. Mitoseriu	<i>Effect of magnostriuctive CoFe<sub>2</sub>O<sub>4</sub> phase on ferroelectric PbTiO<sub>3</sub> phase in magnetoelectric composites</i>	13th European Meeting of Ferroelectricity, Porto, Portugal, 28 June -	2015

			3 July 2015 (oral).	
9	N. Horchidan, L. Padurariu, L. Mitoseriu	<i>FORC method - a complementary analysis for high field characterization for different ferroelectric systems</i>	13th European Meeting on Ferroelectricity EMF, June 28 iunie – 3 iulie, Porto, Portugalia 2015 (poster).	2015
10	C. E. Ciomaga, O. G. Avadanei, I. Dumitru, F. Tufescu and L. Mitoseriu	<i>Tunable microwave filter based on magnetoelectric composites</i>	The 8th International Conference on Advanced Materials: ROCAM 2015, 7-10 July 2015, Bucharest, Romania (poster).	2015
11	N. Horchidan, L. Padurariu, L. Mitoseriu	<i>A complementary analysis based by FORC method used for high field characterization of different ferroelectric systems</i>	The 8th International Conference on Advanced Materials: ROCAM, 7-10 July 2015, Bucharest, Romania (poster).	2015
12	M. Airimioaei, M. T. Buscaglia, V. Buscaglia, L. Mitoseriu, C. E. Ciomaga and L. P. Curecheriu	<i>Investigation of multifunctional composites prepared by using SrTiO<sub>3</sub>@BaTiO<sub>3</sub> core-shell particles as reactive precursors</i>	The 8th International Conference on Advanced Materials: ROCAM 2015, 7-10 July 2015, Bucharest, Romania (oral).	2015
13	C. E. Ciomaga, J. de Frutos Vaquerizo and L. Mitoseriu	<i>Dielectric and magnetic properties of CoFe<sub>2</sub>O<sub>4</sub> -PbTiO<sub>3</sub> magnetoelectric composites</i>	6th management Committee Meeting COST Action 1208 (MCM6), Meetings of the working groups WG1-WG4 September 3-4, 2015, Budapest, Hungary (oral).	2015
14	L. Padurariu, L. Curecheriu, C. Ciomaga, L. Mitoseriu	<i>Tayloring properties in ferroelectric-based composites by local field engineering</i>	7th International Workshop on Amorphous and Nanostructured Magnetic Materials ANMM'2015, 21-24 September 2015, Iasi, Romania (invitat).	2015
15	M. Airimioaei, M.N. Palamaru, A.R. Iordan, L. Mitoseriu	<i>The study of the chelating/combustion agent influence on the functional properties of cobalt ferrites</i>	7th International Workshop on Amorphous and Nanostructured Magnetic Materials - ANMM 2015, Iasi, Romania, 21-24 September 2015 (poster).	2015
16	D.I. Bilc, L. Zarbo, L. Padurariu, si L. Mitoseriu	<i>First-principles modelling of prototypical ferroelectrics under applied finite electric field</i>	COST "Towards Oxides Based Electronics - TO BE" si Conferinta EMRS, Warsawia 14-18 Sept, Polonia (oral).	2015
17	R. Grigalaitis, A. Sakanas, J. Banys, C.E. Ciomaga,	<i>Broadband Dielectric Studies of Cobalt Ferrite and Nb-doped Lead Zirconium Titanate Multiferroic Composites</i>	CIMTEC 2016, 5-9 June, Perugia, Italy (prezentare orală)	2016



	L.Mitoseriu,			
18	F. Gheorghiu, C. Ciomaga, N. Horchidan, M. Simenas, V. Kalendra, J. Banys, L. Mitoseriu	<i>Multiferroic diluted magnetics: The influence of iron addition on the functional properties of BaTiO3 ceramics</i>	COST IC1238 Meetings of Working Groups WG1–WG4, 14-16 April 2016, Vilnius University, Vilnius, Lithuania (prezentare orală)	2016
19	C.E. Ciomaga, O.G. Avadanei, I. Dumitru, M. Airimioaei, F. Tufescu, L. Mitoseriu,	<i>Engineering magnetoelectric composites towards application as tunable microwave filter</i>	21-25 August 2016 ISAF/ECAPD/PFM Conference, Darmstadt, Germany (prezentare poster)	2016
20	M. Airimioaei, C. E. Ciomaga, A. Guzu, N. Horchidan, L. P. Curecheriu, N. Lupu, F. M. Tufescu, and L. Mitoseriu	<i>Study of microstructure and functional properties of layered BaTiO3–ferrite–BaTiO3 magnetoelectric composites obtained by SPS method</i>	EcerS 2017, 15th Conference & Exhibition of European Ceramic Society, July 9-13, 2017, Budapest, Hungary (poster)	2017
<b>ATLASE, DICTIONARE DE SPECIALITATE</b>				
<b>1</b>				
<b>n</b>				
<b>ALTE PUBLICATII</b>				
<b>1</b>				
<b>n</b>				

### Lista achizițiilor realizate în cadrul proiectului

Denumire echipament	Categorie de achiziții* : (numai mijloace fixe)	Valoarea (lei)	Locație
Punte RLC-metru, banda frecv 10MHz		36.295,00	UNIVERSITATEA "ALEXANDRU IOAN CUZA" IASI, Facultatea de Fizica, Lab. Fizica dielectricilor
Distilator apa DP400 cu vas de colectare apa distilata 5000ml		5.315,73	UNIVERSITATEA "ALEXANDRU IOAN CUZA" IASI, Facultatea de Fizica, Lab. Fizica dielectricilor
Faceless instrument to measure magnetic induction		2.974,00	GRADIENT S.R.L.
Cuptor universal cu aer circulabil		6.336,23	UNIVERSITATEA "ALEXANDRU IOAN CUZA" IASI, Facultatea de Fizica, Lab. Fizica dielectricilor
Nisa chimica cu exhaustare		26.572,61	UNIVERSITATEA "ALEXANDRU IOAN

HCH1200			CUZA" IASI, Facultatea de Fizica, Lab. Fizica dielectricilor
Presa manuala izostatica		33.041,20	UNIVERSITATEA "ALEXANDRU IOAN CUZA" IASI, Facultatea de Fizica, Lab. Fizica dielectricilor

**Categorie de achiziții\*:**

1. Echipamente și aparatură de cercetare
2. Rețele de comunicații specializate
3. Baze de date și informații de specialitate
4. Echipamente și mijloace moderne de documentare și comunicare
5. Alte categorii

**Director proiect,  
Prof. Univ. Dr. Liliana Mitoseriu**

