

Anexa 2a

Titlu proiect: Investigation of the mesoscopic polar order and size effects in driving polarization mechanisms of tunability in perovskites (IMPOTUN)

Categorie de proiect: PN-II-RU-TE-2012-3-0150

Contractul de finanțare: 24/26.04.2013

Manager proiect: asist.univ.dr. Lavinia-Petronela Curecheriu

Lista rezultate

Nr. crt.	NUME AUTORI	TITLUL ARTICOLULUI/ CĂRȚII / COMUNICĂRII ȘTIINȚIFICE	REVISTA / VOLUMUL/EDITURA IN CARE A APARUT / CONFERINTA LA CARE S-A COMUNICAT	ANUL PUBLICARII/ COMUNICARII
ARTICOLE ISI				
1	Ana Cazacu, <u>Lavinia Curecheriu</u> , <u>Alexandra Neagu</u> , <u>Leontin Padurariu</u> , Adrian Cernescu, Isabelle Lisiecki, <u>Liliana Mitoseriu</u>	Tunable gold-chitosan, nanocomposites by local field engineering	Applied Physics Letters, 102, 222903	2013
2	<u>Alexandra Maria Neagu</u> , <u>Lavinia Petronela Curecheriu</u> , Ana Cazacu, <u>Liliana Mitoseriu</u>	Impedance analysis and tunability of BaTiO ₃ -chitosan composites: towards active dielectrics for flexible electronics	Composite Part B: Engineering, 66, 109-116,	2014
3	<u>Lavinia Curecheriu</u> , Petronel Postolache, Maria Teresa Buscaglia, Vincenzo Buscaglia, Adelina Ianculescu, <u>Liliana Mitoseriu</u>	Novel magnetoelectric ceramic composites by control of the interface reactions in Fe ₂ O ₃ @BaTiO ₃ core-shell structures	Journal of Applied Physics, 116, 084102	2014
4	<u>Alexandra Maria Neagu</u> , <u>Lavinia Petronela Curecheriu</u> , Mirela Airimioaei, Ana Cazacu, Adrian Cernescu, <u>Liliana Mitoseriu</u> ,	Impedance spectroscopy characterization of relaxation mechanisms in gold-chitosan nanocomposites	Composite Part B: Engineering 71, 210-217	2015
5	<u>Lavinia Petronela Curecheriu</u> , Maria Teresa Buscaglia, Filippo Maglia, Umberto Anselmi-Tamburini, Vincenzo Buscaglia, <u>Liliana Mitoseriu</u> ,	Design tunable materials: ferroelectric-antiferroelectric composite with core-shell structure,	Applied Physics Letters, 105, 252901	2014
6	<u>Lavinia Petronela Curecheriu</u> , Vijatović Petrović M.M, Bobic J.D,	Nonlinear properties of antimony doped BaTiO ₃ ceramics,	Applied Physics A, 119, 681-686	2015

	Stojanović B.,			
7	Roxana Stanculescu, <u>Cristina E. Ciomaga</u> , <u>Leontin Padurariu</u> , Pietro Galizia, Nadejda Horchidan, Claudio Capiani, Carmen Galassi, <u>Liliana Mitoseriu</u> ,	Study of the role of porosity on the functional properties of (Ba,Sr)TiO ₃ ceramics,	Journal of Alloys and Compounds, 643, 79-87	2015
8	<u>Leontin Padurariu</u> , Lavinia <u>Curecheriu</u> , <u>Liliana</u> <u>Mitoseriu</u> ,	Nonlinear dielectric properties of paraelectric- dielectric composites described by a 3D Finite Element Method based on Landau-Devonshire theory,	Acta Materialia 103, 724-734	2016
ARTICOLE ALTE BAZE DE DATE				
1				
n				
CARTI				
1	<u>Leontin Padurariu</u> , <u>Liliana</u> <u>Mitoseriu</u> ,	"Local field engineering approach for tuning dielectric and ferroelectric properties in nanostructured ferroelectrics and composites", in Nanoscale ferroelectrics and multiferroics: Key processes and characterization issues, and nanoscale effects,	Wiley and Sons ISBN: 978-1-118-93575-0, p. 588-611	2016
DOCUMENTATIE TEHNICA, BREVETE				
1				
n				
COMUNICARI STIINTIFICE NATIONALE				
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COMUNICARI STIINTIFICE INTERNATIONALE				
1	<u>L.P. Curecheriu</u> , <u>A.</u> <u>Cazacu</u> , <u>Al. Neagu</u> , <u>L.</u> <u>Padurariu</u> and <u>L. Mitoseriu</u>	Tunable chitosan-based nanocomposite by local field engineering	COST SIMUFER Action MPO904 Workshop Advances in Ferroelectrics and Multiferroics, Prague, Czech Republic, Institute of Physics AS CR,	21 Iulie 2013 (oral)
2.	<u>A. M. Neagu</u> , <u>C. Padurariu</u> , <u>L. P. Curecheriu</u> , <u>L.</u> <u>Mitoseriu</u> ,	Impedance analysis and tunability of BaTiO ₃ - chitosan composites: towards active dielectrics for flexible electronics,	IEEE- ROMSC Conference - 10th Edition	2-3 Septembrie 2013 (poster)
3.	<u>C. E. Ciomaga</u> and <u>L.</u> <u>Mitoseriu</u> ,	Synthesis and functional properties of ceramic composites: Experiment and modeling,	IEEE- ROMSC Conference - 10th Edition	2-3 Septembrie 2013 (invited)
4.	<u>Z.V. Mocanu</u> , <u>L. P.</u> <u>Curecheriu</u> , <u>C. E. Ciomaga</u>	Comparative study of the influence of sintering	IEEE- ROMSC Conference - 10th	2-3 Septembrie 2013 (poster)

	and <u>L. Mitoseriu</u> ,	temperature on the functional properties of BaCe _x Ti _{1-x} O ₃ ceramics,	Edition	
5.	<u>L.P. Curecheriu, L. Mitoseriu</u> ,	Dc-electric-field dependence of dielectric constant in relaxor ferroelectric systems,	COST SIMUFER Action MPO904 Workshop, Kraków, Poland,	2-3 Septembrie 2013 (poster)
6.	<u>L. Padurariu, L. Mitoseriu</u> ,	Electrical properties of ferroelectric composites in terms of local field imhomogeneity,	COST SIMUFER Action MP0904 Workshop, Kraków, Poland,	2-3 Septembrie 2013 (poster)
7.	<u>L. Padurariu, L. Curecheriu, V. Buscaglia, L. Mitoseriu</u> ,	Grain size effect on nonlinear properties in nanostructured ferroelectric ceramics: modelling and experimental validation,	13th International Meeting on Ferroelectricity, Kraków, Poland,	2-6 Septembrie 2013 (oral)
8.	<u>L.P. Curecheriu, V. Musteata, M.T. Buscaglia, V. Buscaglia, L. Mitoseriu</u> ,	Influence of the lengthscale cation mixing degree on the nonlinear dielectric properties of BaZ _x Ti _{1-x} O ₃ ceramics,	13th International Meeting on Ferroelectricity, Kraków, Poland,	2-6 Septembrie 2013 (oral)
9.	<u>L.Padurariu, C. Galassi, L. Mitoseriu</u> ,	Investigation of the role of porosity on the switching properties of Nb-PZT ceramics: experiment and modeling,	10th Student Meeting, Novi Sad, Serbia,	6-9 Noiembrie 2013 (oral)
10.	<u>A. Neagu, L. Padurariu, L. Curecheriu, L. Mitoseriu</u> ,	Dielectric properties of polymer matrix nanocomposites,	The Third Early Stage Researchers Workshop" COST MP0904 – SIMUFER Novi Sad, Serbia,	6-9 Noiembrie 2013 (oral)
11.	<u>L.Padurariu, C.Galassi, L.Mitoseriu</u> ,	Modeling of the Dielectric Properties of Porous Ferroelectric Structures,	Closing Conference COST MP0904 - SIMUFER, CNR-IENI, Genoa, Italy	30 Ianuarie-Februarie 2014, (oral)
12.	<u>L. Curecheriu, M.V. Pop, M.T. Buscaglia, V. Buscaglia, L. Mitoseriu</u> ,	Ferroelectric-relaxor crossover effects on the nonlinear dielectric properties and switching character in BaZ _x Ti _{1-x} O ₃ ceramics,	Closing Conference COST MP0904 - SIMUFER, CNR-IENI, Genoa, Italy	30 Ianuarie-Februarie 2014, (poster)
13.	<u>M.T. Buscaglia, V. Buscaglia, L. Curecheriu, C. Padurariu, M.V. Pop, L. Mitoseriu</u> ,	Antiferroelectric-ferroelectric composite ceramics with novel functional properties,	Closing Conference COST MP0904 - SIMUFER, CNR-IENI, Genoa, Italy	30 Ianuarie-Februarie 2014, (poster)
14.	<u>L.Padurariu, L.Mitoseriu</u> ,	Using Finite Element Method for Material Design: Tailoring Permittivity and Tunability of Ferroelectric Based Composites,	COST IC1208 Workshop, Santarem, Portugal	20-21 Martie 2014, (oral)
15.	<u>L. Padurariu, L. Mitoseriu</u> ,	Tunable composites materials designed by local field engineering,	Electrocermamics XIV, Bucharest, Romania	16-20 Iunie 2014, (oral)
16.	<u>F. Gheorghiu, C.E. Ciomaga, L. Curecheriu, S. Feraru, M. N. Palamaru, V.</u>	Study of structural and electrical properties of double perovskite	Electrocermamics XIV, Bucharest, Romania	16-20 Iunie 2014, (poster)

	Musteata, N. Lupu and <u>L. Mitoseriu</u> ,	$\text{Sm}_2\text{NiMnO}_6$ multiferroic ceramics,		
17.	<u>C. E. Ciomaga</u> , M. Airimioaei, R. Tanasa, C. Galassi, <u>L. Mitoseriu</u> ,	Study of magnetic and dielectric properties of MnFe_2O_4 - ferroelectric ceramic composites,	Electrocermics XIV, Bucharest, Romania	16-20 Iunie 2014, (poster)
18.	<u>L. Curecheriu</u> , M.V. Pop, M.T. Buscaglia, V. Buscaglia, <u>L. Mitoseriu</u> ,	Ferroelectric-relaxor crossover effects on the nonlinear dielectric properties and switching character in $\text{BaZr}_x\text{Ti}_{1-x}\text{O}_3$ ceramics,	Electrocermics XIV, Bucharest, Romania	16-20 Iunie 2014, (oral)
19.	M.T. Buscaglia, V. Buscaglia, <u>L. Curecheriu</u> , C. Padurariu, M.V. Pop, <u>L. Mitoseriu</u> ,	Antiferroelectric-ferroelectric composite ceramics with novel functional properties,	Electrocermics XIV, Bucharest, Romania	16-20 Iunie 2014, (poster)
20.	R. Stanculescu, <u>C. E. Ciomaga</u> , C. Galassi, L. Mitoseriu,	Functional properties of graphite-derived porous BaSrTiO_3 ceramics,	14th International Balkan workshop on applied physics, Constanta, Romania	2-4 Iulie 2014 (poster)
21.	<u>L.P. Curecheriu</u> , <u>L. Padurariu</u> , <u>L. Mitoseriu</u> ,	Nonlinear dependence of dielectric constant in polymerbased composite,	European Conference on Application of Polar Dielectrics Vilnius, Lithuania	7-11 Iulie 2014 (oral)
22.	<u>C. E. Ciomaga</u> , M. Airimioaei, <u>L. P. Curecheriu</u> , M. T. Buscaglia, V. Buscaglia, <u>L. Mitoseriu</u> ,	Dielectric and non-linear properties of $\text{SrTiO}_3@\text{BaTiO}_3$ core-shell ceramic	European Conference on Application of Polar Dielectrics, Vilnius, Lithuania	7-11 Iulie 2014 (oral)
23.	<u>L.P. Curecheriu</u> , M.T. Buscaglia, V. Buscaglia, C. Padurariu, <u>L. Mitoseriu</u> ,	Combining antiferroelectric-ferroelectric in composite in searching new functional properties,	European Conference on Application of Polar Dielectrics, Vilnius, Lithuania	7-11 Iulie 2014 (poster)
24.	R. Stanculescu, <u>C. E. Ciomaga</u> , C. Galassi, <u>L. Mitoseriu</u> ,	The role of porosity on the functional properties of BaSrTiO_3 ceramics	Autumn School on Physics of Advanced Materials (PAMS1), Iasi, Romania	Septembrie 2014, (poster)
25.	<u>L.P. Curecheriu</u> , <u>L. Padurariu</u> , M. T. Buscaglia, V. Buscaglia, <u>L. Mitoseriu</u> ,	Non-linear dielectric properties in ferroelectric-based ceramics: material design, experiment and modelling,	TO-BE Spring Meeting 2015, MP1308 COST Action TO-BE, Aveiro, Portugal	30 Martie-2 Aprilie 2015 (poster)
26.	R. Stanculescu, <u>C. E. Ciomaga</u> , N. Horchidan, C. Capiani, C. Galassi, <u>L. Mitoseriu</u> ,	Oxygen vacancies-related dielectric response of $\text{Ba}_{0.70}\text{Sr}_{0.30}\text{TiO}_3$ ceramics,	14th International Conference European Ceramic Society, Toledo, Spain	21-25 Iunie, 2015, (poster)
27.	<u>C. E. Ciomaga</u> , <u>L. Padurariu</u> , <u>L. P. Curecheriu</u> , I. Lisiecki, M. Deluca, C. Galassi, <u>L. Mitoseriu</u> ,	Using multi-walled carbon nanotubes in spark plasma sintered ferroelectric ceramics for tailoring dielectric and tunability properties,	The 8th International Conference on Advanced Materials: ROCAM 2015, Bucuresti, Romania	7-10 Iulie 2015, (oral).
28.	<u>L. Padurariu</u> , <u>L.</u>	Modeling the size effects on	The 8th International	7-10 Iulie

	<u>Curecheriu, V.</u> <u>Buscaglia,</u> <u>L. Mitoseriu,</u>	the nonlinear dielectric properties in nanostructures ferroelectric, ceramics,	Conference on Advanced Materials: ROCAM 2015 Bucuresti, Romania	2015, (oral)
29.	<u>L. Padurariu, L.</u> <u>Curecheriu, L. Mitoseriu,</u>	Nonlinear dielectric properties of ferroelectric-dielectric composites described by a 3D Finite Element Method based on Landau-Devonshire theory,	3rd International School of Oxide Electronics, Cargese, Franta,	12-24 Octombrie (2015) (poster)
30.	<u>L.P. Curecheriu, M.T.</u> Buscaglia, V. Buscaglia, G. Canu, <u>L. Mitoseriu,</u>	Preparation and functional properties of $Ba_{0.85}Ca_{0.15}Zr_{0.10}Ti_{0.90}O_3$ ceramics with different grain size,	Electrocermics XV, Limoges, Franta	27-29 Iunie 2016, (oral)
31.	<u>L.P. Curecheriu, C.E.</u> <u>Ciomaga, N.</u> Horchidan, M. Simenas, <u>L. Mitoseriu,</u>	Effect of Fe doping on the ferroelectric-relaxor crossover in $BaZr_xTi_{1-x}O_3$ ceramics,	European Conference on Application of Polar Dielectrics, Darmstad, Germania	21-25 August 2016, (poster)
ATLASE, DICTIONARE DE SPECIALITATE				
1				
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ALTE PUBLICATII				
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Lista achizițiilor realizate în cadrul proiectului

Denumire echipament	Categorie de achiziții*: (numai mijloace fixe)	Valoarea (lei)	Locație
Computer FAST DATA HDD 1Tb, MEM. Kingston DDR III 64 BIT (8x8GB), 1600 MHz	Echipamente si aparatura de cercetare	14.253,80	Lab. Dielectrii
Notebook TOSHIBA SATELLITE P855-339	Echipamente si aparatura de cercetare	4.979,84	Lab. Dielectrii
Matrița presă hidraulica diametru 12mm	Echipamente si aparatura de cercetare	7.080,40	RAMTECH
Matrița presă hidraulica diametru 6mm	Echipamente si aparatura de cercetare	6.162,80	RAMTECH
Sursa de curent si tensiune HM7042-5	Echipamente si aparatura de cercetare	3.660,00	Lab. Dielectrii

Multimetru TRMS cu inregistrare	Echipamente si aparatura de cercetare	2.382,00	Lab. Dielectrici
Multimetru profesional TRMS	Echipamente si aparatura de cercetare	2.190,00	Lab. Dielectrici
Vas zirconiu pentru tratament termic	Echipamente si aparatura de cercetare	2.101,73	Lab. Dielectrici
Rotor unghiular pentru centrifuga UNIVERSAL	Echipamente si aparatura de cercetare	2.877,60	Lab. Dielectrici

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

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