

## **RAPORT DE AUTOEVALUARE** **perioada 2004-2015**

### 1. Datele de autentificare ale unității de cercetare-dezvoltare

1.1. Denumirea: REGO COM

1.2. Statutul juridic<sup>\*1)</sup>: SRL

1.3. Actul de înființare<sup>\*2)</sup>: Sentinta civila nr. 1274 din 6 august 1991, Dosar nr. 1414/SC/1991, Judecatoria sector VI Municipiul Bucuresti

1.4. Numărul de înregistrare în Registrul potențialilor contractori: 979/2006

1.5. Director general / administrator: Balasoiu Horia Nicolae

1.6. Adresa: calea 13 Septembrie 115, bl. 111, ap. 3, sector 5 Bucuresti

1.7. Telefon: 021 7814126; fax: 021 4109291; pagina web: www.regocom.ro,  
e-mail:office@regocom.ro

### 2. Domeniul de specialitate

2.1. Conform clasificării UNESCO<sup>\*3)</sup>: 3303. Ingineria si tehnologia chimica  
2302.99. Chimia agentilor tensioactivi  
2301.99. Chimie analitica-colorimetrie

2.2. Conform clasificării CAEN: 2451-Fabricarea sapunurilor, detergentilor si a produselor de intretinere;

7310- Cercetare dezvoltare in stiintele fizice si naturale

5255- Comert cu ridicata al produselor chimice

### 3. Starea unității de cercetare-dezvoltare

3.1. Misiunea unității de cercetare-dezvoltare, direcțiile de cercetare, dezvoltare, inovare:

SC REGO COM SRL desfasoara cercetarea aplicativa in domeniul chimiei organice, anorganice, si analitice, si cercetarea fundamentala in domeniul stiintei materialelor, prin autofinantare.

- Cercetarea aplicativa are in vedere:

a) Realizarea unei game proprii de produse de spalare cu spumare marita (detergenti high foam), cu spumare redusa (low foam), sapunuri lichide, detergenti, detartranti, degresanti, dezinfectanti pentru uz industrial si institutional, in conformitate cu legislatia nationala si europeana. Pentru produsele rezultate din cercetare s-au inregistrat la OSIM, Bucuresti, marile EURODET , YDAL si DESC.

b) Caracterizare fizico-chimica a produselor realizate prin cercetare proprie.

c) Studii privind realizarea produselor de spalare ecologice, in colaborare cu INCD pentru Ecologie Industriala, ECOIND, Bucuresti, Romania.

d) Studiarea activitatii biocide a produselor destinate pentru igiena umana si dezinfectarea suprafetelor tari, in colaborare cu INCD pentru Microbiologie si Imunologie "Cantacuzino", Bucuresti, INCD Chimico-Farmaceutica, Bucuresti, Institutul de sanatate Publica, Bucuresti, Spitalul Clinic Dermato-Venerice "Prof. Dr. Scarlat Longhin" – Laboratorul de Alergologie cutanata, Bucuresti, Institutul de Virusologie "Stefan S. Nicolau", Bucuresti .

e) Realizarea de truse de identificarea chimica (colorimetrica) a diferitelor clase de produse periculoase si de marcare a alimentelor expirate (marca inregistrata "DESC").

- Cercetarea fundamentala:

a) in domeniul spalarii si sanitizarii in industria alimentara;

b) in domeniul materialelor oxidice feroelectrice: relatia dintre micro- si nanostructura cu proprietatile dielectrice, optice si piezoelectrice ale materialelor de tip PT si PZT cu diferite adausuri. Cercetarea materialelor oxidice este realizata prin participarea in cadrul programului european cu acronimul POLECER, contract G5RT-CT-2001-05024/14.03.2001, "Associated membership agreement No.14 (07.10.2003-2007), cooperare cu School of Electrical Engineering and Telecommunications, The University of New South Wales Sydney 2052, NSW, Australia, Istituto dei Sistemi Complessi, Area di Ricerca Tor Vergata, Via del Fosso del Cavaliere 100, I-00133, Rome, Italy, Interdisciplinary Research Institute for Micro and Nanostructures, University "Ovidius", Constanta, Romania, INCD Fizica Materialelor, Magurele, Romania.

3.2. Modul de valorificare a rezultatelor de cercetare, dezvoltare, inovare și gradul de recunoaștere a acestora.

-SC REGO COM SRL valorifica rezultatele cercetarii aplicative prin vanzarea produselor proprii (detergenti, dezinfectanti, sapunuri lichide, degresanti, solutii de marcare a alimentelor alterate), care se fabrica in cadrul sectiei de productie, catre societati din industria alimentara, societati comerciale, institutii publice (spitale, hoteluri, restaurante, tipografii, etc.).

- Rezultatele cercetarii stiintifice din cadrul SC REGO COM se disemineaza prin prezentarea acestora la conferinte internationale, publicarea in Proceedings si in reviste de specialitate, recunoscute international.

3.3. Situația financiară: SC REGO COM SRL nu are datorii la bugetul de stat.

#### 4. Criterii primare de performanță

#### 4.1 Lucrări științifice/tehnice publicate în reviste de specialitate cotate ISI

##### 4.1.1 Număr de lucrări științifice

##### 2005

4

1. Dimitriu, E, Ramer, R, Ciupina, V, Prodan, G, Calboreanu, A, *Microstructural investigation of complex doped PT-type ceramics. FERROELECTRICS*, 319, pp. 229-236, 2005.
2. Dimitriu, E, Craciun, F, Ramer, R, Prodan, G, Ciupina, V, *Properties, stability and aging in (Pb,Sr)TiO<sub>3</sub>-PbZrO<sub>3</sub>-Pb(Mg<sub>1/3</sub>Sb<sub>2/3</sub>)O<sub>3</sub> ferroelectric ceramics. JOURNAL DE PHYSIQUE IV*, 128, pp. 105-110, 2005.
3. Dimitriu, E, Craciun, F, Ghica, C, Ramer, R, *Nanostructure and properties of Pb(Zr, Ti)O<sub>3</sub>-Pb(Ni<sub>1/3</sub> Nb<sub>2/3</sub>)O<sub>3</sub> piezoceramics. JOURNAL DE PHYSIQUE IV*, 128, pp. 139-143, 2005.
4. Elena Dimitriu, A. Iuga, V. Ciupina, G. Prodan, Rodica Ramer, " PZT –Type Materials with Improved Radial Piezoelectric Properties ", *J. European Ceramic Society*, Vol 25, No 12, pp 2402-2404, 2005

##### 2006

3

5. Dimitriu, E, Ramer, R, Craciun, F, Prodan, G, Ciupina, V, *Structure - properties relationships in Ce-doped lead titanate ceramics. JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS*, 8 (1), pp. 55-59, 2006.
6. Dimitriu, E, Craciun, F, Cernea, M, Ramer, R, *Effect of lead content and B-site substitutions on dielectric and piezoelectric properties of PZT ceramics. ADVANCED MATERIALS FORUM III, PTS 1 AND 2. MATERIALS*

**SCIENCE FORUM**, 514-516, pp. 188-192, 2006.

7. Dimitriu, E, Iuga, A, *Piezoelectric material for high efficiency ultrasonic siren*. **ADVANCED MATERIALS FORUM III, PTS 1 AND 2. MATERIALS SCIENCE FORUM**, 514-516, pp. 225-229, 2006.

**2007** **1**

8. Dimitriu Elena, Iuga Alin, Ramer Rodica, Sandu Ion, Cernea Marin. "Structural and Dielectric Investigations of Donor-Acceptor Substituted PZT Ceramics", **FERROELECTRICS**, 353(1): 138-148, Jun 2007, Publisher:TAYLOR & FRANCIS.

**2008** **1**

9. E. Dimitriu, F. Craciun, G. Prodan, V. Ciupina, Dielectric and piezoelectric properties of Bi-doped PZT-PNN ceramics, **Journal of Optoelectronics and Advanced Materials** JOAM, vol.10, No.11(2008) 2947-2953.

**2009** **3**

10. E. Dimitriu, F. Craciun, R. Ramer, Effect of Li Addition in (Pb,Ca)(Ti,W,Co)O<sub>3</sub> Piezoelectric Ceramics, **Optoelectronics and Advanced Material-Rapid Communications**, 3 (3), 2009, 255-259. (Printing date 24 March 2009)

11. E.Dimitriu, F. Craciun, G.Prodan, R.Ramer, V.Ciupina, Dielectric and piezoelectric properties of Bi-doped PZT-PNN ceramics, **JOAM Symposia**, 1 (3), 2009, 416-419

12. **E. Dimitriu**, S.C. Moldoveanu, E.E. Iorgulescu, Solvent-reagent effect in chemical detection of energetic materials type contaminants, **Russian Journal of Physical Chemistry**, 83 (9) , 1537-1541, 2009

**2010** **1**

13. **E. Dimitriu**, R. Ramer, F. Craciun, Mapping local defects in PbO-based piezoceramics, J. Cryst. Growth, on-line publication 26-Nov-2010, <http://dx.doi.org/10.1016/j.jcrysgro.2010.11.029>

**2011**

**E. Dimitriu**, R. Ramer, F. Craciun, Mapping local defects in PbO-based piezoceramics, J. Crystal Growth, 317 (1) 16-22, 2011

**2013** **1**

14. F. Craciun, **E. Dimitriu**, M. Grigoras, and N. Lupu, Multiferroic perovskite  $Pb_{0.845}Sm_{0.08}Fe_{0.035}(Ti_{0.98}Mn_{0.02})O_3$  with ferroelectric and weak ferromagnetic properties Appl. Phys. Lett. 102, 242903 (2013).

**2014** **1**

15. F. Craciun, **E. Dimitriu**, M. Grigoras, N. Lupu, M. Cernea, V. B. Stefan, The emergence of magnetic properties and magnetoelectric coupling in (RE,Pb)TiO<sub>3</sub> perovskite ceramics, Journal of Applied Physics;2014, Vol. 116 Issue 7, p074101-1

#### 4.1.2.Punctaj cumulati ISI\*5)

FERROELECTRICS, 319, pp. 229-236, 2005	0,459
JOURNAL DE PHYSIQUE IV, 128, pp. 105-110, 2005.	0,389
JOURNAL DE PHYSIQUE IV, 128, pp. 139-143, 2005	0,389
J. European Ceramic Society, Vol 25, No 12, pp 2402-2404, 2005	1,567
JOURNAL OF OPTOELECTRONICS AND ADV. MAT, 8 (1), pp. 55-59, 2006	1,106
MATERIALS SCIENCE FORUM, 514-516, pp. 188-192, 2006	0.399 (2005)
MATERIALS SCIENCE FORUM, 514-516, pp. 225-229, 2006	0.399 (2005)
FERROELECTRICS 353(1): 138-148 Jun 2007	0,43
JOURNAL OF OPTOELECTRONICS AND ADV MAT, 10(11) pp. 2947-2953, 2008	0,577
OAM-RC	-

**13,132**

JOAM Symposia  
 RUSSIAN JOURNAL OF PHYSICAL CHEMISTRY, 2009  
 JOURNAL OF CRYSTAL GROWTH noiembrie 2010  
 APPL. PHYS. LETTERS, 102, 242903 (2013).  
 J.APPL.PHYS (2014)

-  
 0,183  
 1,534  
 3,515  
 2,185 (IF din 2013)

**total: 13,132**

4.1.3. Număr de citări în reviste de specialitate cotate ISI: **48**

**Lucrare citata:** F. Constantinescu, P. Nicolau, E. Dimitriu, Vasiliu, C. Bunescu, F. Craciun, A. Bettucci, F. Farrelly and A. Allippi, Properties of Porous Piezoelectric Ceramics” Fourth Euro. Ceramics, 5, 145 (1995)

Titlul lucrării	Autor	Anul citării	revista
1. Finite element modelling of 3-3 piezocomposites	A Perry, C.R. Bowen and S.W. Mahon.	1999	<i>Scripta Materialia</i> , Vol. 41, No.9, pp 1001-1007

**Lucrare citata :** Effect of Nb, Li doping on structure and piezoelectric properties of PZT type ceramics, C. Tanasoiu, E. Dimitriu, C. Miclea, *Journal of the European Ceramic Society*, 19 (6-7), (1999) pp. 1187-1190.

Titlul lucrării	Autor	Anul citării	revista
1. Lanthanum and niobium doping on PZT ceramic synthesis	Durruthy Rodríguez, María D.; Hernández García, Moisés; Suárez Gómez, Amaury	2002	<i>Revista CENIC. Ciencias Químicas</i> , vol. 33, núm. 1, enero-abril, 2002, pp. 29-33 Centro Nacional de Investigaciones Científicas. ISSN (Printed Version): 1015-8553 La Habana, Cuba
2. Elaboration et caractérisation de films épais piézoélectriques sérigraphiés sur alumine, silicium, aciers inoxydables et vitrocéramiques	Laurence SIMON épouse SEVEYRAT	2002	<a href="http://theses.insa-lyon.fr/publication/2002ISAL0073/these.pdf">http://theses.insa-lyon.fr/publication/2002ISAL0073/these.pdf</a> THESE Présentée devant L’institut national des sciences appliquées de Lyon Pour obtenir Le grade de docteur Formation doctorale: Génie Electrique de Lyon École doctorale: Electronique, Electrotechnique, Automatique
3. Doping effects of Nb additives on the piezoelectric and dielectric properties of PZT ceramics and its application on SAW device	<u>Chu, S.-Y.</u> , <u>Chen, T.-Y.</u> , <u>Tsai, I.-T.</u> , <u>Water, W.</u>	2004	<i>Sensors and Actuators, A: Physical</i> 113 (2), pp. 198-203
4. Effects of poling field on the piezoelectric and dielectric properties of Nb	<u>Chu, S.-Y.</u> , <u>Chen, T.-Y.</u> , <u>Tsai, I.-T.</u>	2004	<i>Materials Letters</i> 58 (5), pp. 752-756

additive PZT-based ceramics and their applications on SAW devices			
5. Effect of Nb and Y codoping on the microstructure and electrical properties of the PZT ceramics	ZHANG Rui-fang, ZHANG He-ping	2004	<a href="http://downlunwen.zdnet.com.cn/H048990/pdf/350.pdf">http://downlunwen.zdnet.com.cn/H048990/pdf/350.pdf</a>
6. Effect of Y and Nb codoping on the microstructure and electrical properties of lead zirconate titanate ceramics	<u>Zhang, R.F., Zhang, H.P., Ma, J., Chen, Y.Z., Zhang, T.S.</u>	2004	<i>Solid State Ionics</i> 166 (1-2), pp. 219-223
7. Electrical properties of Nb-doped PZT 65/35 ceramics: Influence of Nb and excess PbO	<u>M'Peko, J.-C., Peixoto, A.G., Jiménez, E., Gaggero-Sager, L.M.</u>	2005	<i>Journal of Electroceramics</i> 15 (2), pp. 167-176
8. Ferro-and piezo-electric properties of Nb-doped PZT 65/35 ceramics	<u>M'Peko, J.-C.</u>	2006	<i>Ferroelectrics</i> 333, pp. 243-252
8. Property improvement of 0.3Pb(Zn <sub>1/3</sub> Nb <sub>2/3</sub> )O <sub>3</sub> -0.7Pb0.96La0.04(Zr <sub>x</sub> Ti <sub>1-x</sub> )0.99O <sub>3</sub> ceramics by hot-pressing	<u>Deng, G., Ding, A., Zheng, X., Zeng, X., Yin, Q.</u>	2006	<i>Journal of the European Ceramic Society</i> 26 (12), pp. 2349-2355

<p>10. Effects of Fe<sub>2</sub>O<sub>3</sub> Addition on Piezoelectric Properties of Pb(Ni<sub>1/3</sub>Nb<sub>2/3</sub>)O<sub>3</sub>-PbZrO<sub>3</sub>-PbTiO<sub>3</sub> Ceramic for actuator Applications</p>		2006	<p><i>Journal of the Korean Institute of Electrical and Electronic Material Engineering</i>, Vol 19, No 10, p.935, October 2006</p>
<p>11. <b>Effect of Nb doping on structural and electric properties of PZT (65/35) ceramic</b></p>	<p>Mohiddon, Md.A. ; Kumar, R. ; Goel, P. ; Yadav, K.L.</p>	2007	<p><i>Dielectrics and Electrical Insulation, IEEE Transactions on Dielectrics and Electrical Insulation</i>, 14, (1) (2007) 204 - 211</p> <p>ISSN :1070-9878 INSPEC Accession Number:9298545 DOI:<a href="https://doi.org/10.1109/TDEI.2007.302889">10.1109/TDEI.2007.302889</a></p>
<p>12. <b>Study of Effect of Ce and Mn Substitution on Structural, Dielectric and Electrical Characteristics of Pb (Zr<sub>0.65</sub>Ti<sub>0.35</sub>) O<sub>3</sub> Ceramics</b></p>	<p>Balgovind Tiwari and R. N. P. Choudhary</p>	2008	<p><i>Proceedings of the International Workshop on Mesoscopic, Nanoscopic and Macroscopic Materials</i> (IWMNMM-2008) <b>Conference date:</b> 2–4 January 2008 <b>Location:</b> Bhubaneswar (India) <b>ISBN:</b> 978-0-7354-0593-6 100 <b>Editors:</b> Shyamalendu M. Bose , S. N. Behera and B. K. Roul <b>Volume number:</b> 1063 <b>Published:</b> 23 octombrie 2008 <b>Front Matter for Volume 1063</b> AIP Conf. Proc. <b>1063</b>(2008); <a href="http://dx.doi.org/10.1063/v1063.frontmatter">http://dx.doi.org/10.1063/v1063.frontmatter</a></p>
<p>13. High throughput method for the development of bulk lead free piezoelectric ceramics</p>	<p>Aur�lie Cardin</p>	2009	<p><i>Dissertation Zur Erlangung des Grades des Doktors der Naturwissenschaften der Naturwissenschaftlich-Technischen Fakult�t III Chemie, Pharmazie und Werkstoffwissenschaften Der Universit�t des Saarlandes</i> <a href="http://scidok.sulb.uni-saarland.de/volltexte/2009/2194/pdf/dissA_Cardin_210609.pdf">http://scidok.sulb.uni-saarland.de/volltexte/2009/2194/pdf/dissA_Cardin_210609.pdf</a></p>

<p>14. Frequency–temperature response of <math>\text{Pb}(\text{Zr}_{0.65-x}\text{Ce}_x\text{Ti}_{0.35})\text{O}_3</math> ferroelectric ceramics: Structural and dielectric studies</p>	<p>Balgovind Tiwari, R.N.P. Choudhary</p>	<p>2009</p>	<p><i>Physica B: Condensed Matter</i>, 404 (21) (2009) 4111–4116 <a href="https://doi.org/10.1016/j.physb.2009.07.171">doi:10.1016/j.physb.2009.07.171</a></p>
<p>15. Effects of B-Site Doping on Piezoelectric and Ferroelectric Properties of <math>\text{Pb}_{0.88}\text{Sr}_{0.12}(\text{Zr}_{0.54}\text{Ti}_{0.44}\text{Sb}_{0.02})_{(1-y)} - (\text{Zn}_{1/3}\text{Nb}_{2/3})_y\text{O}_3</math> Ceramics</p>	<p>P. Parjansri, S. Inthong, K. Sutjarittangtham, G. Rujijanagul, T. Tunkasiri, U. Intatha, P. Pengpad &amp; S. Eitssayeam</p>	<p>2011</p>	<p><i>Ferroelectrics</i>, <a href="#">Volume 415</a>, <a href="#">Issue 1</a>, 2011, p29-34</p>
<p>16. Influence of Mn doping on domain wall motion in <math>\text{Pb}(\text{Zr}_{0.52}\text{Ti}_{0.48})\text{O}_3</math> films.</p>	<p>Wanlin Zhu, Ichiro Fujii, Wei Ren, S. Trolier-McKinstry</p>	<p>2011</p>	<p><i>Journal of Applied Physics</i> 109(6):064105-064105-6 · MARCH 2011 DOI: 10.1063/1.3552298</p>

12. Piezoelectric properties of ferroelectric ceramic Pb(Zr,Ti)O <sub>3</sub> doped with Sr and Fe	F. A. Londoño, D. J. López, M. H. Lente, J. A. Eiras y D. Garcia	2012	<i>Rev. Cub. Fis.</i> <b>29</b> , 57 (2012)
13. Conduction Mechanism by Using CBH Model in Fe <sup>3+</sup> and Mn <sup>3+</sup> Ion Modified Pb(Zr <sub>0.65-x</sub> A <sub>x</sub> Ti <sub>0.35</sub> )O <sub>3</sub> (A = Mn <sup>3+</sup> /Fe <sup>3+</sup> ) Ceramics	<u>Niranjan Sahu, S. Panigrahi, and Manoranjan Kar</u>	2013	<i>Journal of Materials</i> Volume 2013 (2013), Article ID 802123, 10 pages <a href="http://dx.doi.org/10.1155/2013/802123">http://dx.doi.org/10.1155/2013/802123</a>
14. Rietveld analysis, dielectric and impedance behaviour of Mn <sup>3+</sup> /Fe <sup>3+</sup> ion-modified Pb (Zr <sub>0.65</sub> Ti <sub>0.35</sub> ) O <sub>3</sub> perovskite	N Sahu, S Panigrahi	2013	<i>Bulletin of Materials Science</i> , 36 (14) (2013) 699-708
15. Structural and Dielectric Studies of Pb(Zr <sub>0.65</sub> Ti <sub>0.35</sub> )O <sub>3</sub> Electroceramics Modified by Manganese	Algovind Tiwari and R. N. P. Choudhary	2013	<i>Int. J. of Modern Phys. Conf. Ser.</i> 22, 483 (2013). DOI: 10.1142/S2010194513010556
16. Effect of Excess Li <sub>2</sub> CO <sub>3</sub> Addition on the Physical and Electrical Properties of Lead-Free Bi <sub>0.5</sub> (Na <sub>0.82</sub> /K <sub>0.18</sub> ) <sub>0.5</sub> TiO <sub>3</sub>	Chun Huy Wang	2013	<i>Ceramics, Advanced Materials Research.</i> 09/2013; 779-780:3-6.
17. Structure and electrical properties evolution of B-site complex ions (Li <sub>1/4</sub> Nb <sub>3/4</sub> ) modification BNT–BT ceramics	X. X. Ma; W. Z. Li; W. D. Zeng; C. R. Zhou; T. Yang; Q. Y. Yu; J. M. Zeng	2014	<i>Advances in Applied Ceramics</i> , 113, (6) (2014), pp. 362-366
18. The effect of sintering conditions on the microstructure and electrical properties of Pb(Zr <sub>0.52</sub> Ti <sub>0.48</sub> )O <sub>3</sub> ceramic	Nur Shafiza Afzan Sharif, Julie Juliewatty Mohamed, Hutagalung Sabar Derit, Zainal Arifin Ahmad, Mohd. Zulkifly Abdullah, HasmalizMohamad and Wan Azhar Wan Yusoff	2014	<i>Journal of Mechanical Engineering and Sciences (JMES)</i> ISSN (Print): 2289-4659; e-ISSN: 2231-8380; Volume 6, pp. 901-906, June 2014 © Universiti Malaysia Pahang, Malaysia DOI: <a href="http://dx.doi.org/10.15282/jmes.6.2014.16.0086">http://dx.doi.org/10.15282/jmes.6.2014.16.0086</a>



19. Influence of Li doping on domain wall motion in $\text{Pb}(\text{Zr}_{0.52}\text{Ti}_{0.48})\text{O}_3$ films	Wanlin Zhu, Ichiro Fujii, Wei Ren, Susan Trolier-McKinstry	2014	<i>Journal of Materials Science</i> November 2014, Volume 49, <b>Issue 22</b> , pp 7883-7889 DOI: 10.1007/s10853-014-8500-0
20. Structure and electrical properties evolution of B-site complex ions ( $\text{Li}_{1/4}\text{Nb}_{3/4}$ ) modification BNT–BT	X.X.Ma, W.Z.Li, W. D. Zeng, C.R. Zhou, T. Yang, Q. Y. Yu, J. M. Zeng	2014	<i>Advanced in Applied Ceramics</i> , 113(6):362-366 · AUGUST 2014 DOI: 10.1179/1743676114Y.0000000172
21. Dielectric, ferroelectric and piezoelectric properties of $\text{Nb}^{5+}$ doped BCZT ceramics	Piewpan Parjansri, Uraiwan Intatha, Sukum Eitssayeam	2015	<i>Materials Research Bulletin</i> 05/2015: 65:61-67. DOI: 10.1016/j.mattersbull.2015.01.040

**Lucrarea citata:** Elena Dimitriu, A. Iuga, V. Ciupina, G. Prodan, Rodica Ramer, “PZT-type materials with improved radial piezoelectric properties” *Journal of the European Ceramic Society*, 25 (10) (2005) 2401–2404

Titlul lucrării	Autor	Anul citării	Revista
1. Fabrication and Characterization of Lead Zirconate Titanate Nano-Powder with a Gel-Combustion Method	PENG Yangxi, ZHANG Ping, HU Chuanyue	2011	<i>Journal of The Chinese Ceramic Society</i> , Vol. 39, No. 3, March, 2011
2. High electromechanical performance with spark plasma sintering of undoped $\text{K}_{0.5}\text{Na}_{0.5}\text{NbO}_3$ ceramics	M Bah, F Giovannelli, F. Schoenstein, G. Feuillard	2014	<i>Ceramics international</i> , 40 (5) (2014) 7473-7480

**Lucrare citata:** A. Calboreanu, E. Dimitriu, and R. Ramer, “Statistics of Size Distribution of Rare Earth Agglomerations in Ceramic Matrix”, *Rom. J. Phys.* 50, 545 (2005).

Titlul lucrării	Autor	Anul citării	Revista
1. A nonextensive statistical method of multiple particle breakage	O. Sotolongo-Costa, L. M. Gaggero-Sager, M. E. Mora-Ramos	2014	<a href="http://arxiv.org/pdf/1412.1122.pdf">http://arxiv.org/pdf/1412.1122.pdf</a>

**Lucrarea citata:** E. Dimitriu, F. Craciun, C. Ghica and R. Ramer, “Nanostructure and Properties of  $\text{Pb}(\text{Zr,Ti})\text{O}_3$ - $\text{Pb}(\text{Ni}_{1/3}\text{Nb}_{2/3})\text{O}_3$  Piezoceramics”, *J. Phys. IV France*, 128, 139-143 (2005).

Citare in : [http://archive.lib.cmu.ac.th/full/T/2009/mat0309ok\\_bib.pdf](http://archive.lib.cmu.ac.th/full/T/2009/mat0309ok_bib.pdf)

**Lucrare citata :** E. Dimitriu, R.Ramer, C, Ghica, A. Iuga, V. Ghiordanescu, Piezoelectric and optical properties of Sr-doped PT-PZ-Pb(Mg<sub>1/3</sub>Nb<sub>2/3</sub>)O<sub>3</sub>, Journal of the European Ceramic Society, 24 (2004) 1703-1708

Titlul lucrării	Autor	Anul citării	Revista
1. Efecto de la razon Zr/Ti sobre las propiedades de la ceramica PZR modificada con 0.05 mol de estroncio	J. Costa Marrero, A. Suarez-Gomez, J. Saniger Blesa, F. Calderón-Piñar	2009	<i>Revista Cubana de Fisica</i> , 26 (2009) 174-178
2. Effect of sintering conditions on properties of Cr-doped Pb <sub>0.95</sub> Sr <sub>0.05</sub> (Zr <sub>0.53</sub> Ti <sub>0.47</sub> )O <sub>3</sub> ceramics	J. Costa Marrero, A. Suarez-Gomez, J. Saniger Blesa, F. Calderón-Piñar	2009	<i>Bulletin of Material Science</i> , 32(4):381-386, 2009
3. RF MEMS for reconfigurable RF front-end: Research in Australia	Lian Gong, King Yuk Chan, Yi Yang, Rodica Ramer	2014	DOI: 10.4028/www.scientific.net/AMR.901.105
4. Effects of ZnO content on piezoelectric, dielectric, and magnetic properties of Sr-modified PZT-PMW-PNN/ (Ni-Co-Cu) ME Composites	Xiaolian Chao, Juanjuan Wang, Chao Kang, Mingyuan Dong, Zupey Yang	2015	<i>Journal of Electronic Materials</i> , 44(10):3415-3421,2015 DOI: 10.1007/s11664-015-3887-1

**Lucrare citata :** Elena Dimitriu, Elena Daniela Ion (Millikan), Serban Constantinescu, Mihaela Bunescu, Rodica Ramer, Eu-Doped PT-Type Ceramics. I. Preparation and structural investigation, Ferroelectrics, 294, 85–92 (2003).

Titlul lucrării	Autori	Anul citării	Revista
1. HF Modeling for the electrical property determination of the lead-free piezoelectric material	I. B. Ciobanu, D. Ionescu	2009	<i>Romanian Reports in Physics</i> , 61 (1) (2009) 105-114
2. Local-site cation ordering of Eu <sup>3+</sup> ion in doping PbTiO <sub>3</sub>	Yanela Mendez Gonzales, Arbelio Pentón Madrigal, Aimé Peláiz, B. Concepción - Rosabal	2013	<i>Physica B. Condensed Matter</i> , 434:171, February 2014 Impact Factor: 1.32 · DOI: 10.1016/j.physb.2013.11.035
3. Chromatic dispersion penalties in orthogonal subcarrier-optical tandem sideband system (OTSSB)	H.A. Abdul-Rashid, H.T. Chuah, M.B. Tayahi, M.T. Al-Qdah, R.C. Lee, S.K. Lanka	Dec. 2015	DOI: 10.1109/ICON.2005.1635488 · Source: <a href="#">IEEE Xplore</a> Conference: Networks, 2005. Jointly held with the 2005 IEEE 7th Malaysia International Conference on Communication., 2005 13th IEEE International Conference on, Volume: 1

**Lucrare citata:** E. Dimitriu, C.M. Bunescu, A. Iuga, R. Ramer, Influence of Microstructure on Physical Properties of PT Porous Ceramics, *Ferroelectrics*, 270, 45-50, 2002

Titlul lucrării	Autori	Anul citării	Revista
1. Guide to the Literature of Piezoelectricity and Pyroelectricity. 22	Sydney Lang	2004	<i>Ferroelectrics</i> , 308(1):193-304 · January 2004 DOI: 10.1080/00150190490508927
2. Preparation and microstructure of ZrO <sub>2</sub> and LaCaO <sub>3</sub> – based high porosity ceramics	G.M. Kaleva, N.V. Golubko, S.V. Suvorkin, G.V.Kosarev, I.P. Sukhareva, A.K. Avetisov, E.D.Politova	2012	<i>Inorganic Materials</i> 42(7) (2012)799-805

**Lucrare citata:** F. Craciun, E. Dimitriu, M. Grigoras, and N. Lupu, Multiferroic perovskite (Pb<sub>0.845</sub>Sm<sub>0.08</sub>Fe<sub>0.035</sub>)(Ti<sub>0.98</sub>Mn<sub>0.02</sub>)O<sub>3</sub> with ferroelectric and weak ferromagnetic properties, *Appl. Phys. Lett.* 102, 242903 (2013); doi: 10.1063/1.4811258

Titlul lucrării	Autori	Anul citării	Revista
1. The emergence of magnetic properties in (Pb <sub>0.88</sub> Nd <sub>0.08</sub> )(Ti <sub>0.98</sub> Mn <sub>0.02</sub> )O <sub>3</sub> perovskite ceramics	F. Craciun, E. Dimitriu, M. Grigoras, N. Lupu, B.S.Vasile, M. Cernea	2014	<i>Journal of Applied Physics</i> 116(7) 2014 4101
2. Room temperature multiferroic properties of (Fe <sub>x</sub> Sr <sub>1-x</sub> )TiO <sub>3</sub> thin films	Kyoung-Tae Kim, Cheolbok Kim, Sheng-Po Fang, Yong-Kyu Yoon	2014	<i>Applied Physics Letters</i> . 09/2014; 105(10): 102903-102903-5 DOI: 10.1063/1.4894850
3. Thickness effect on the properties of BaTiO <sub>3</sub> -CoFe <sub>2</sub> O <sub>4</sub> multilayer thin films prepared by chemical solution deposition	Dai Yuqiang, J.M. Dai, X. W. Tang, K. J. Zhang, X. B. Zhu, Juncheng Yang, Y.P. Sun	2014	<i>Journal of Alloys and Compounds</i> 587:681-687 · February 2014 Impact Factor: 3.00 · DOI: 10.1016/j.jallcom.2013.11.026
4. Structural, electrical and magnetic properties of multiferroic Bi <sub>1-x</sub> Gd <sub>x</sub> Fe <sub>0.97</sub> Co <sub>0.03</sub> O <sub>3</sub> thin films	Xu Xue, Guoqiang Tan, Wenlong Liu, Hangfei Hao	2015	<i>Journal of Alloy and Compounds</i> 622:477-482 (2015)
5. Induction and control of room temperature ferromagnetism in dilute Fe-doped srTiO <sub>3</sub> ceramics	Ju He, Xiaomei Lu, Weili Zu, Yanyan Hou	2015	<i>Applied Phys Letters</i> , 107, 012409 (2015)

**Lucrare citata (monografie):** Elena Dimitriu, Pompiliu Nicolau, Vitalie Teodoru, Ultrasunetele- Utilizarea in biologie si industria alimentara, Ed. Ceres, Bucuresti, 1990

Titlul lucrării	Autori	Anul citării	Revista
1. The influence of the ultrasound treatment on some physiological and biological parameters in <i>Spinacia Oleracea</i> L. Seeds	Stratu Anisoara, Zenovia Olteanu, M. Piepteanu, Murariu Alexandrina	2009	<i>Analele Stiintifice ale Universitatii "Alexandru Ioan Cuza", Sectiunea Genetica si Biologie Moleculara</i> , TOM X

Lucrare citata: Elena Dimitriu, Rodica Ramer, Cormel Miclea, C. Tanasoiu, Piezoelectric Properties of Tungsten Doped PZT Type Materials, *Ferroelectrics* 241(1):207-213 · DOI: 10.1080/00150190008224993

Titlul lucrării	Autori	Anul citării	Revista
1. Liquid-phase sintering of Pb(Zr,Ti)O <sub>3</sub> using PbO-WO <sub>3</sub> additive	E.R. Nielsen, E. Ringgaard, M. Kosec	2002	<i>Journal of the European Ceramic Society</i> , 22, 1847-1855 (2002)
2. Microanalysis of Pb(Zr, Ti, W, Li)O <sub>3</sub> Piezoceramic	R. Ramer, E. Dimitriu, I. Boerasu, A. Iuga	2004	<i>Key of Engineering Materials</i> , Vols. 264-268, (2004), pp. 1173-1176, 2004 Trans Tech Publications, Switzerland
3. Nanostructure and properties of Pb(Zr,Ti)O <sub>3</sub> -Pb(Ni <sub>1/3</sub> Nb <sub>2/3</sub> )O <sub>3</sub> piezoceramics	E. Dimitriu, F. Craciun, C. Ghica, R. Ramer	2005	<i>J.Phys. IV France</i> , <b>128</b> (2005) 139-143
4. Structural and dielectric investigations of donor-acceptor substituted PZT ceramics	Elena Dimitriu, Alin Iuga, Rodica Ramer	2007	<i>Ferroelectrics</i> , 353(1): 138-148 2007
5. Sintering and electrical properties of tungsten doped Pb(Zr <sub>0.95</sub> Ti <sub>0.05</sub> ) <sub>3</sub> ferroelectric ceramics	Jun Xia Wang, Xu Lan Zhen, Shi Yuan Yang, Jin Wang	2011	<i>Materials Science Forum</i> , 687, 380-384 (2011)
6. RF MEMS for Reconfigurable RF Front-End: Research in Australia	Lian Gong, King Yuk Chan, Yi Yang, Rodica Ramer	2014	<i>Advanced Material Research</i> , Vol 901, Chapter 2: MEMS Design and Production, pp105-110 (2014) DOI: 10.4028/www.scientific.net/AMR.901.105

## 4.2. Brevete de invenție

### 4.2.1. Număr de brevete

#### 4.2.2. Număr de citări de brevete în sistemul ISI

4.3. Produse și tehnologii rezultate din activități de cercetare, bazate pe brevete, omologări sau inovații proprii. Studii prospective și tehnologice și servicii rezultate din activitatea de cercetare-dezvoltare, comandate de beneficiar

(Se indică contractul și firma care utilizează produsul, serviciul și tehnologia).

4.3.1. Număr de produse, tehnologii, studii, servicii 43x20=860

Lista produselor,

**2006:** 1 produs  
**DESC 027EX 100**

**2007** 11 produse  
**EURODET 100IN, EURODET 100EX, EURODET 200 IN, EURODET 200 EX, EURODET VERRE 2, EURODET MA, DESC AM, EURODET KRIO, EURODET ALU, EURODET LF 15, EURODET FORTE A**

**Anul 2008** 7 PRODUSE  
**EURODET B3, EURODET DEC, EURODET HF 15, EURODET LF 16, EURODET U, EURODET HF CLOR, EURODET HF14 RTU**

**Anul 2009** 4 PRODUSE  
**EURODET CAR, EURODET SUPER K, EURODET SAPUN ABRAZIV, EURODET ALU 2,**

**Anul 2010** 7 PRODUSE  
**EURODET ALU3, EURODET SAMPON AUTO, EURODET VM 10, EURODET 50, EURODET DETARTRANT N, EURODET PAVIMENT, EURODET GEAMURI**

**Anul 2011** 3 PRODUSE **EURODET ALU 4, EURODET ALU 5, EURODET BT,**

**Anul 2012** 2 PRODUSE  
**YDAL TEX, EURODET HF 10**

**Anul 2013** 4 PRODUSE  
**EURODET VM 10 RTU, EURODET HF 12, EURODET HF 12 RTU, EURODET HF 10 RTU**

**Anul 2014** 4 PRODUSE **EURODET SUPER CRIO K, EURODET SUPER KP, EURODET HF A, EURODET HF P**

## 5. Criterii secundare de performanță

5.1. Lucrări științifice (tehnice) publicate în reviste de specialitate (cotate CNCSIS) fără cotație ISI

5.1.1. Număr de lucrări

6

- A.Calboreanu, **E. Dimitriu**, R. Ramer, "Statistics of Size Distribution of Rare Earth Agglomerations in Ceramic Matrix", *Romanian Journal of Physics*, **2005**
- H.N.Balasoiu, D.I.Buriu, E. Dimitriu, Spalarea utilajelor din industria de prelucrare a carni, Buletin AGIR, Supliment 1/ 2010 <http://www.agir.ro/buletine/899.pdf>

### Proceedings

**IEEE UFFC 2004:** **E. Dimitriu**, F. Craciun, V. Ciupina, G. Prodan, R. Ramer, "Complex Rare-earth Substituted Lead Titanate Piezoceramics", *IEEE-UFFC Symposium*, 24-27 august, 2004, Montreal, Canada

**SPIE 2004:** **E. Dimitriu**, F. Craciun, R. Ramer, G. Prodan, V. Ciupina, "Complex Rare-earth Substituted Lead Titanate Piezoceramics. II", *SPIE*, Sydney, Australia, decembrie, **2004**

**ECerS, 2008:** **E. Dimitriu**, F. Craciun, R. Ramer, "Influence of additives on dielectric and piezoelectric properties of PZT ceramics", Proceedings of the 10th International Conference and Exhibition of the European Ceramic Society, ECerS, 2008, Edited by J.G. Heinrich and C. G. Aneziris, Göller Verlag GmbH, Baden-Baden, 2008, **ISBN 3-87264-022-4**, pg. 641-645

**PHYSICAL CHEMISTRY 2008:** **E. Dimitriu**, S.C. Moldoveanu, E.E. Iorgulescu, Proceedings of the 9th International Conference on Fundamental and Applied Aspects of Physical Chemistry, Vol. II, pg. 621-628, K-3-SL, September 24-26, 2008, Belgrade, Serbia, **ISBN 978-86-82475-13-2**, Editor Prof. Dr. A. Antic-Jovanovic. Published by The Society of Physical Chemists of Serbia, Belgrade, Serbia; Printed by: "Jovan" Printing and Publishing Comp, September 2008.

## 5.2. Lucrări științifice prezentate la conferințe internaționale cu comitet de program

### 5.2.1. Număr de comunicări prezentate 39

#### Anul 2004 5

1. **ELECTROCERAMICS IX, 31 mai -3 iunie, 2004, Cherbourg, Franta**, "Microstructure of the PZT-type Materials with Improved Radial Piezoelectric Properties", autori: Elena Dimitriu, Alin Iuga, Rodica Ramer.

2. **IEEE-UFFC Symposium, 24-27 august, 2004, Montreal, Canada**, "Complex Rare-earth Substituted Lead Titanate Piezoceramics", autori: E. Dimitriu, F. Craciun, V. Ciupina, G. Prodan, R. Ramer.

3. **ECAPD7, Liberec, Republica Cehia, 6-9 Sept. 2004**, Microstructural Investigation of Complex Doped PT-type Ceramics, autori: Elena Dimitriu, Rodica Ramer, V. Ciupina, G. Prodan, A. Calboreanu.

4. **The 3<sup>rd</sup> International Colloquium "Mathematics in Engineering and Numerical Physics, Bucharest, 7-9 October, 2004**, "Statistics of Size Distribution of Rare Earth Agglomerations in Ceramic Matrix", autori: A. Calboreanu, E. Dimitriu, R. Ramer.

5. **SPIE, Sydney, Australia, decembrie, 2004**, "Complex Rare-earth Substituted Lead Titanate Piezoceramics. II", autori: E. Dimitriu, F. Craciun, R. Ramer, G. Prodan, V. Ciupin.

#### Anul 2005 5

6. **Materials 2005, Aveiro, Portugalia, martie 2005**, "Effect of PZT Composition on Dielectric and Piezoelectric Properties", autori: E. Dimitriu, F. Craciun, M. Cernea, R. Ramer

7. **Materials 2005, Aveiro, Portugalia, martie 2005**, "Piezoelectric Material for High efficiency ultrasonic siren", autori: E. Dimitriu, A. Iuga.

8. **POLECER Workshop EMGS "Electro-active materials and sustainable growth", Franta, mai, 2005**, "Nanostructure and Properties of  $Pb(Zr,Ti)O_3-Pb(Ni_{1/3}Nb_{2/3})O_3$  Piezoceramics", autori: E. Dimitriu, F. Craciun, C. Ghica, R. Ramer.

9. **POLECER Workshop EMGS "Electro-active materials and sustainable growth", Franta, mai, 2005**, "Properties Stability and Aging in  $(Pb,Sr)TiO_3-PbZrO_3-Pb(Mg_{1/3}Sb_{2/3})O_3$  Ferroelectric Ceramics", autori: E. Dimitriu, F. Craciun, V. Ciupina, G. Prodan, R. Ramer

10. **6-th INTERNATIONAL BALKAN WORKSHOP ON APPLIED PHYSICS, CONSTANTA, ROMANIA, July 5-7, 2005**, "Structure –Property Relationships in Ce-Doped Lead Titanate Ceramics", autori: Elena Dimitriu, Rodica Ramer, Floriana Craciun, Gabriel Prodan, Victor Ciupina.

#### Anul 2006 3

11) **ELECTROCERAMICS X, Toledo, Spania, 2006**, "Microstructure and physical properties of PT and PZT-PT piezoceramics with cerium and manganese content", autori: E. Dimitriu, R. Ramer, M. Cernea

12) **ELECTROCERAMICS X, Toledo, Spania, 2006**, "Multicomponent ceramic based on relaxor – ferroelectrics", autori: E. Dimitriu, F. Craciun, G. Prodan, R. Ramer, V. Ciupina

13) **ECAPD 8, Metz, Franta, 2006**, "Structural and Dielectric Investigations of Donor –Acceptor Substituted PZT Ceramics", autori: Elena Dimitriu, Alin Iuga Rodica Ramer, Ion Sandu, Marin Cernea

#### Anul 2007 5

14) **PIEZO 2007, POLECER conference. Piezoelectricity for End Users III, Liberec, Republica Ceha, februarie 2007**, "Anisotropy in  $(Pb,Ca)TiO_3-Pb(Co,W)O_3$  Ceramics", autori: Elena Dimitriu, Floriana Craciun, Gabriel Prodan, and Victor Ciupina

15) **PIEZO 2007, POLECER conference. Piezoelectricity for End Users III, Liberec, Republica Ceha, februarie 2007**, "Optical and Transport Phenomena in Doped -PT and PZT Ceramics", autori: Elena Dimitriu, Marian Sima, Victor Ghiordanescu, Rodica Ramer, Gheorghe Virgil Aldica

16) **10th International Conference and Exhibition of the European Ceramic Society, ECerS, Berlin, Germania, iunie 2007**, "High anisotropy  $(Pb,Ca)(Ti,W,Co)O_3$  piezoelectric ceramics: the effect of Li addition", autori: E. Dimitriu, F. Craciun, R. Ramer

17) **10th International Conference and Exhibition of the European Ceramic Society, ECerS, Berlin, Germania, iunie 2007**, "Influence of additives on dielectric and piezoelectric properties of PZT ceramics", autori: E. Dimitriu, F. Craciun, R. Ramer

18) **SIMI 2007 Simpozion International "MEDIU SI INDUSTRIA, Bucuresti, 2007**, "Process of Complaints Handling-Way to Improve the Clients' satisfaction into a SME Supplier of Products for Hygiene and Sanitation", autori: Ana Anghel, Elena Dimitriu

**Anul 2008** 4

19) **Condensed Matter Physics Conference of Balkan Countries, CMPC BC2008, 26-28 May, Mugla, Turcia, 2008**, "Dielectric and piezoelectric properties of Bi-doped PZT-PNN ceramics", autori: E. Dimitriu, F. Craciun, G. Prodan, R. Ramer, V. Ciupina,

20) **Condensed Matter Physics Conference of Balkan Countries, CMPC BC2008, 26-28 May, Mugla, Turcia, 2008**, "Microstructure and Physical properties of Li-doped  $(\text{Pb,Ca})\text{TiO}_3\text{-Pb}(\text{O,W})\text{O}_3$ ", autori: E. Dimitriu, F. Craciun, G. Prodan, R. Ramer, V. Ciupina

21) **9th International Balkan Workshop on Applied Physics, 7-9 iulie, 2008, Constanta, Romania**, "Processing - Structure - Dielectric and Piezoelectric Properties Correlation in PbO- Based Ceramics", autori: E. Dimitriu, F. Craciun, G. Prodan, V. Ciupina

22) **PHYSICAL CHEMISTRY 2008, 24-26 September 2008, Belgrad**, "Solvent-reagent effect in chemical detection of energetic materials type contaminants", autori: E. Dimitriu, S.C. Moldoveanu, E.E. Iorgulescu

**Anul 2009** 4

23) **Simpozionul PROGRESUL TEHNOLOGIC - REZULTAT AL CERCETARII, 10 aprilie 2009, Bucuresti, Romania**, "Spalari in industria alimentara (Cleaning in Food industry)", autori H.N.Balasoiu, D.I.Buriu, E. Dimitriu

24) **XI ECerS, Krakow, Poland, 21-25 June, 2009**, "Impedance spectroscopy study of complex doped lead titanate ceramics", autori: F.Craciun, E. Dimitriu, R. Ramer

25) **10th International Balkan Workshop on Applied Physics, IBWAP, 6-8 iulie, 2009, Constanta, Romania**, "Biodegradation of cleaning products used in food industry", autori: E. Dimitriu, Irina Lucaciu, Stefania Gheorghe, Dorel Ioan Buriu

26) **ROMANIAN CONFERENCE ON ADVANCED MATERIALS: ROCAM 2009, Brasov, Romania, 25-28 August 2009**, "Mapping local defects in PbO-based piezoceramics", autori: E. Dimitriu, R. Ramer, F. Craciun,

**Anul 2010** 4

27) **11th International Balkan Workshop on Applied Physics, IBWAP, Constanta, Romania, 7-9 iulie 2010**, "Processing, structural investigation and physical properties of PZT ceramics", Autor: E. Dimitriu

28) **11th International Balkan Workshop on Applied Physics, IBWAP, Constanta, Romania, 7-9 iulie 2010**, "Dielectric properties of Pb-based complex perovskite relaxor ferroelectrics", Autori: Elena Dimitriu, Marin Cernea, Steluta Popescu, Victor Ciupina

29) **FNMA"2010, 7th International Workshop on Functional and Nanostructured Materials, 16-20 July, 2010, Malta**, "Soft magnetic thick films electroless deposited on insulator materials", Autori: Elena Dimitriu, Nicoleta Lupu

30) **Seventh International Conference on Inorganic Materials, Biarritz, France, September 12-14, 2010**, "Donor doping of PZT materials", Autori: Elena Dimitriu, Rodica Ramer

**Anul 2011** 3

31) **International Symposium on Reactivity of Solids", June 27<sup>th</sup> – July 1<sup>st</sup> 2011, Bordeaux, Franta**, Local Defects in W and Li Substituted Lead Titanate Zirconate Ceramics, Autori: E. Dimitriu, R. Ramer, "

32) **12<sup>th</sup> International Balkan Workshop on Applied Physics, IBWAP, 6-8 iulie 2011, Constanta, Romania**, "Dielectric and piezoelectric properties of ferroelectrics Relaxors, Autor: E. Dimitriu

33) **Surfactants, Soap and Detergent Symposium and Exhibition, 1-3 Decembrie 2011, Izmir, Turcia**, "High Foam Cleaning Method in Food Industry", Autori: H. Balasoiu, I.D.Buriu, E. Dimitriu,

**Anul 2012**

1

34) **The 7<sup>th</sup> Romanian Conference on Advanced Materials, ROCAM , 28-31 august 2012, Brasov, Romania**, "Defect Chemistry in Perovskite Ceramics", Autori: **E. Dimitriu**, R. Ramer.

**Anul 2013**

2

35) **34th International Symposium on Dynamical Properties of Solids, dyProSo XXXIV, September 15-19th, 2013, Vienna, Austria**, , Book of Abstracts, p. 126 "Ferroelectricity and magnetism in (Sm, Fe)-doped PbTiO<sub>3</sub> perovskite ceramics", Autori: F. Craciun, **E. Dimitriu**, M. Grigoras, N. Lupu and M. Cernea.

36) Conference **COST MPO904 Action, 22-23 Aprilie 2013, Faenza, Italia**, „Multiferroic properties of (Sm, Fe)-doped PbTiO<sub>3</sub> perovskite ceramics“, Autori: F. Craciun, **E. Dimitriu**, M. Grigoras, N. Lupu and M. Cernea. COST MPO904 Action „Single-and multiphase ferroics and multiferroics with restricted geometries”

Conference of the Working Group 3 Recent advances in ferro/piezoelectric and multiferroic-based composites, 22-23 Aprilie 2013, National Research Council of Italy, Institute of Science and Technology for Ceramics, Via Granarolo, 64 Faenza (ITALY)

**Anul 2014**

1

37) **ELECTROCERAMICS XIV , Bucuresti, Romania, 16-20 iunie 2014**, „The emergence of magnetic properties and magnetoelectric coupling in (RE,Pb)TiO<sub>3</sub> perovskite ceramics”, Autori: F. Craciun, **E. Dimitriu**, M. Grigoras, N. Lupu, M. Cernea, V. B. Stefan

**Anul 2015**

2

38) **The 8th International conference on Advanced Materials, ROCAM 2015, Bucuresti, Romania, 7-10 iulie 2015**, „Local microstructure in lead titanate piezoceramics with dilute content of magnetic ions, autori: Elena Dimitriu, Marin Cernea, Roxana Trusca, Rodica Ramer

39) **The 15th International Balkan Workshop on Applied Physics, IBWAP 2015, Constanta, Romania 2-4 iulie 2015**, „Microstructure and electrical properties of complex substituted PZT ceramics, Autori: S. Popescu, N. Horchidan, L. V. Nica, E. Dimitriu,

5.3. Modele fizice, modele experimentale, modele funcționale, prototipuri, normative, proceduri, metodologii, reglementări și planuri tehnice noi sau perfecționate, realizate în cadrul programelor naționale sau comandate de beneficiar

5.3.1. Număr de modele, normative, proceduri etc.:

27

(Pentru implementarea sistemul integrat al managementului de calitate si mediu (conform standardelor SR EN ISO 9001:2001 si SR EN ISO 14001:2005), realizata prin autofinantare si finalizata in anul 2007, s-au elaborat procedurile:

Nr. crt.	Cod procedura	Denumire procedura	Data primei editii
1	PG-01	Elaborarea si gestionarea procedurilor	02.10.2006
2	PS-01	Controlul documentelor	02.10.2006
3	PS-02	Controlul inregistrarilor	03.10.2006
4	PS-03	Audit intern	09.10.2006
5	PS-04	Controlul produsului neconform. Neconformitati de mediu	12.10.2006
6	PS-05	Actiuni corective	13.10.2006
7	PS-06	Actiuni preventive	17.10.2006
8	PS-07	Analiza efectuata de management (analiza date si imbunatatirea continua)	20.10.2006
9	PS-08	Managementul resurselor umane	23.10.2006
10	PS-09	Planificarea realizarii produsului si procesele	25.10.2006



		referitoare la relatia cu clientul	
11	PS-10	Cercetare-dezvoltare, proiectare	27.10.2006
12	PS-11	Aprovizionare	20.10.2006
13	PS-12	Proces de productie	01.11.2006
14	PS-13	Controlul dispozitivelor de masurare si monitorizare: mentenanta utilajelor	03.11.2006
15	PS-14	Prevederi legale si alte cerinte de evaluarea conformarii	08.11.2006
16	PS-15	Comunicarea interna si externa	13.11.2006
17	PS-16	Identificarea aspectelor de mediu si evaluarea impacturilor asociate	13.11.2006
18	PS-17	Procedura de monitorizare si masurare	16.11.2006
19	PS-18	Controlul operational	16.11.2006
20	PS-19	Pregatire pentru situatii de urgenta si capacitatea de raspuns	17.11.2006
21	PL-GDA	Gestionarea deseurilor si a ambalajelor	21.11.2006
22	PL-SCTP	Substante chimice toxice si periculoase	23.11.2006
23	PL-DMP	Procedura de divizare a materiei prime	03.12.2006
24	PL-DV	Procedura de distributie, vanzare, transport	07.12.2006
25	IF- DET	Instructiuni fabricatie detergenti	ianuarie 2006
26	IF-SL	Instructiuni fabricatie sapunuri lichide	februarie 2006
27	IF-YSM	Instructiuni fabricatie YDAL SM	februarie 2006

## 6. Prestigiul profesional

6.1. Membri (incluzând statutul de recenzor) în colectivele de redacție ale unor reviste (cotate ISI sau incluse în baze de date internaționale) sau în colective editoriale ale unor edituri internaționale recunoscute

Număr de prezențe în perioada pentru care se face evaluarea: **10**

Nr. crt. Nume Titlul revistei/editurii

6.1. Recenzor in colective de redactie (Dr. Elena Dimitriu) **10**

1. Ferroelectrics (2006)
2. Material Research Bulletin (2006)
3. Journal of Electroceramics (2007)
4. Smart Material Structure (2007)
5. Journal of American Ceramic Society (2007)
6. Journal of Phys. D (01.01.2008)
7. Journal of Phys. D (18.02.2008)
8. Journal of Phys D-Applied Physics (2009)
9. Journal of American Ceramic Society (2010)
10. Journal of American Ceramic Society (2014)

6.2. Membri în colectivele de redacție ale revistelor recunoscute național (din categoria B în clasificarea CNCSIS)

Număr de prezențe:

Nr. crt. Nume Titlul revistei/editurii

6.3. Premii internaționale obținute printr-un proces de selecție

Număr de premii:

Nr. crt. Nume Premiul Anul

6.3.a. Premiere poster la conferinta internationala

1

1. Premiul II la **conferinta Surfactants, Soap and Detergent Symposium and Exhibition, 1-3 Decembrie 2011, Izmir, Turcia**, pentru posterul "High Foam Cleaning Method in Food Industry",  
Autori: H. Balasoiu, I.D.Buriu, **E. Dimitriu**

6.4. Premii naționale ale Academiei Române

Număr de premii:

6

Nr. crt.

1 Premiu national CNCSIS Articol- **anul 2007** - "STRUCTURAL AND DIELECTRIC INVESTIGATIONS OF DONOR-ACCEPTOR SUBSTITUTED PZT CERAMICS", autori Dimitriu Elena (SC REGO COM SRL), Iuga Alin, Ramer Rodica, Sandu Ion, Cernea Marin, publicat in **FERROELECTRICS** 353(1): 138-148 Jun 2007, Publisher:TAYLOR & FRANCIS

2 Premiu national CNCSIS Articol –anul 2008 pentru articolul: "Dielectric and piezoelectric properties of Bi-doped PZT-PNN ceramics", autori E. Dimitriu, F. Craciun, G. Prodan, V. Ciupin, publicat in **Journal of Optoelectronics and Advanced Materials JOAM**, vol.10, No.11(2008) 2947-2953,

3. Premiu national CNCSIS Articol –anul 2009 pentru articolul, Solvent-reagent effect in chemical detection of energetic materials type contaminants, autori E. Dimitriu, S.C. Moldoveanu, E.E. Iorgulescu, publicat in **Russian Journal of Physical Chemistry**, 83 (9), 1537-1541, 2009,

4. Premiu national CNCSIS Articol –anul 2012 pentru articolul Mapping local defects in PbO-based piezoceramics, autori **E. Dimitriu**, R. Ramer, F. Craciun, publicat in **J. Crystal Growth**, 317 (1) 16-22, 2011

5. Premiu national CNCSIS Articol –anul 2013 pentru articolul "Multiferroic perovskite  $Pb_{0.845}Sm_{0.08}Fe_{0.035}(Ti_{0.98}Mn_{0.02})O_3$  with ferroelectric and weak ferromagnetic properties" autori: F. Craciun, **E. Dimitriu**, M. Grigoras, and N. Lupu, publicat in **Appl. Phys. Lett.** 102, 242903 (2013).

6. Premiu national CNCSIS Articol –anul 2014, pentru articolul "The emergence of magnetic properties and magnetoelectric coupling in (RE,Pb)TiO<sub>3</sub> perovskite ceramics", autori F. Craciun, **E. Dimitriu**, M. Grigoras, N. Lupu, M. Cernea, V. B. Stefan, publicat in **Journal of Applied Physics**, Vol. 116 Issue 7, p074101-1 (2014)

6.5. Conducători de doctorat, membri ai unității de cercetare -

Număr de conducători de doctorat:

6.6. Număr de doctori în știință, membri ai unității de cercetare

Număr de doctori în știință:

1

7. Venituri realizate prin contracte de cercetare în domeniul pentru care se face evaluarea (în perioada pentru care se face evaluarea):

7.1. Numărul și valoarea contractelor de cercetare internaționale finanțate din fonduri publice:

7.2. Numărul și valoarea contractelor de cercetare internaționale finanțate din fonduri private:

7.3. Numărul și valoarea contractelor de cercetare naționale finanțate din fonduri publice:

7.4. Numărul și valoarea contractelor de cercetare naționale finanțate din fonduri private:

7.5. Alte surse:

7 bis. Venituri realizate din activități economice (servicii, microproducție):

**Cifra de afaceri a SC REGO COM SRL din anul 2014: 2.286.129 lei**

**Ponderi din valorificarea rezultatelor CDI: 90%**

8. Resursa umană de cercetare

(situația va fi prezentată pe ani)

8.1. Total personal de cercetare care realizează venituri din activitatea de cercetare-dezvoltare/din care doctori în știință: **3/1**

8.1.1. Cercetători științifici gradul 1 (profesori)/din care doctori în știință:

8.1.2. Cercetători științifici gradul 2 (conferențieri)/din care doctori în știință: **1/1**

8.1.3. Cercetători științifici gradul 3 (lectori)/din care doctori în știință:

8.1.4. Cercetători științifici/din care doctori în știință: -

8.1.5. Asistenți de cercetare:

8.1.6. Total personal auxiliar de cercetare angajat:-

8.2. Date privind perfecționarea resursei umane

8.2.1. Număr de doctoranzi și masteranzi care lucrează în unitatea de cercetare-dezvoltare la data completării formularului:-

8.2.2. Număr de teze de doctorat realizate în unitatea de cercetare-dezvoltare în perioada pentru care se face evaluarea:-

9. Infrastructura de cercetare-dezvoltare

9.1. Laboratoare de cercetare-dezvoltare:

Nr. crt. Denumirea laboratorului Domeniul în care este acreditat

9.2. Lista echipamentelor performante achiziționate în ultimii 10 ani:-