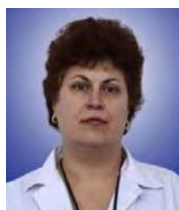


PERSONAL INFORMATION

Magdalena-Valentina LUNGU



 National Institute for Research and Development in Electrical Engineering ICPE-CA (INCDIE ICPE – CA) Bucharest, Romania
 +40 21 346.72.31/ext. 108  +40723686334
 magdalena.lungu@icpe-ca.ro magda_lungu71@yahoo.com
orcid.org/0000-0002-5399-6847 <http://www.researcherid.com/rid/G-3932-2017>
<https://www.brainmap.ro/profile/MAGDALENA-VALENTINA-LUNGU>

Sex: Female | Date of birth: 05/03/1971 | Nationality: Romanian

WORK EXPERIENCE

- Nov. 2004 – present **Senior researcher, CS I** from Dec. 2015 (OM 6006 of Dec. 18th, 2015), CS II from Sept. 2011, IDT II from Jan. 2009, CS III from Jan. 2007, CS from July 2002), PhD. from 2008; Research & Development experience: over 20 years.
at INCDIE ICPE-CA Bucharest, Splaiul Unirii No. 313, 030138 Bucharest, Romania
Main activities and responsibilities:
- **Project Director/Responsible and participant in R&D projects;**
 - **Head of Multifunctional Metallic Materials Laboratory** (March 2015 – present);
 - **Member in Advisory Body** of INCDIE ICPE-CA Bucharest for some research works approval within ongoing R&D projects (March 2015 – present); **Technical Adviser/Responsible** (2013 – present) and **Head of Process Development and Quality Assurance** of electrical contact pieces based on Ag-MeO (MeO = CdO, SnO₂, ZnO, a.o.), W-Ag/Cu, WC-Ag/Cu, a.o. from the Electrical Contacts Pilot Station of INCDIE ICPE-CA Bucharest (2011-2013);
 - Studies and experimental researches on manufacturing electrical contact pieces based on W-Cu/Ag, WC-Cu/Ag by powder metallurgy techniques: pressing-sintering-infiltration and spark plasma sintering;
 - Studies and experimental researches on manufacturing metallic, ceramic and metal-ceramic sputtering targets by spark plasma sintering process;
 - Studies and experimental researches on manufacturing sintered electrical contacts of Ag-MeO (MeO = CdO, SnO₂, ZnO), Ag-AgNPs/MeO, W-Ag/Cu, Ag-C, Ag-Ni-C, Ag-Ni a.o. types by powders metallurgy techniques: pressing-sintering-repressing;
 - Studies and experimental researches on manufacturing antimicrobial nanostructured materials and coatings by physical and chemical methods;
 - Thin films and bulk solids characterization by UV-Vis spectroscopy, micro/nanoindentation (Vickers hardness, Young modulus, stiffness), microscratch (critical loads for adhesion/cohesion of thin films deposited on different substrates), tribological test (friction coefficient, wear rate) and Calotest method;
 - Studies and experimental researches on manufacturing junctions of dissimilar materials by spark plasma sintering and hot soldering;
 - Studies and experimental researches on manufacturing electrode materials for NiMH batteries;
 - Studies and experimental researches on manufacturing colloidal Ag solutions and colloidal suspensions of nanocomposite powders of AgMeO (MeO = SnO₂, TiO₂, ZnO, a.o.) type by chemical synthesis; Studies and experimental researches on manufacturing composite powders of Ag nanoparticles deposited on SnO₂, TiO₂, ZnO, BaSO₄, etc. and their physical and optical characterization;
 - Nanoparticles characterization by UV-Vis-NIR spectrophotometry, Dynamic Light Scattering (DLS) and Electrophoretic Light Scattering (ELS) techniques; Studies and experimental researches on manufacturing nanostructured composites for use in textile and leather industry; Processing of some ceramic structures doped with silver nanoparticles (AgNPs);
 - Studies and experimental researches on manufacturing stable allotropic Sn-Cu-Ti and Sn-Bi-Sb alloys at low temperatures for anticorrosive coating and soft soldering;
 - Studies upon manufacturing light alloys based on Al or Mg by bringing of the alloy in a semisolid state, followed by thixotropization and its injection in die and their physical-mechanical characterization.
- Business or sector: Advanced Materials & Multifunctional Metallic Materials
- Oct. 1999 – Nov. 2004 **Junior researcher (CS from July 2002, Eng.)**
at SC ICPE SA Bucharest, Splaiul Unirii No. 313, 030138 Bucharest, Romania
Main activities and responsibilities: Participant in R&D projects; Experimental researches on recovery of fine grained wastes (slimes) resulted from industrial processing of steels; Studies and experimental researches on obtaining powders mixtures by mechanical homogenization or milling and/or chemical precipitation and their characterization; Experimental research on obtaining porous metallic materials for cooling of electronic components; Experimental researches on plastic deformation of sintered semi-finishes
Business or sector: Conductive Materials
- May 1997 – Oct. 1999 **Junior researcher (Eng.)**
at SC ICPE SA Bucharest, Splaiul Unirii No. 313, 030138 Bucharest, Romania
Main activities and responsibilities: Translations in/from English in Romanian; Works and correspondence in international cooperation programs
Business or sector: International Relationships

Nov. 1995 – May 1997 **Junior researcher (Eng.)** at SC ICPE SA Bucharest, Splaiul Unirii No. 313, Bucharest, Romania
 Main activities and responsibilities: Responsible for quality assurance; Design of different products; Realization of programs for manufacturing products with complex shapes for wire electro erosion equipment; Business or sector: Prototypes

EDUCATION AND TRAINING

- Nov. 2003 – June 2008 **Ph.D. in Materials Science and Engineering**
 Thesis Title: "Contributions concerning the manufacturing some new types of Ag-SnO₂ electrical contacts for low voltage switching devices"
 Education organization's name: Technical University of Cluj Napoca, Faculty of Materials Science and Engineering, Romania
 Principal subjects covered: Materials Science and Engineering, Powder Metallurgy, Electrical Contact Materials, Low Voltage Switching Devices Working in Air
- Sept. 1989 – June 1994 **Engineer**
 Education organization's name: Politechnical University of Bucharest, Faculty of Mechanical Engineering, Romania
 Principal subjects covered: Mechanical Engineering
- 22 Febr.-9 March, 2012 **Training in the LaNi₅ materials field, performed abroad within the Contract FP7-REGPOT-229906, ICPE-HYFC project**
 Training organization's name: Kiev National University of Technology & Design, Ukraine
 Supervisor: Prof. Viacheslav Barsukov, Head of Department for Electrochemical Power Engineering & Chemistry
 Principal subjects covered: Materials Science and Engineering, LaNi₅ Materials, Ni-MH Batteries
- June 1, 2016 **Training for operating CALOTEST equipment performed at INCDIE ICPE-CA headquarter within the PNCD II - PARTNERSHIPS PCCA project - Contract 215/2014**
 Training organization's name: ANTON PAAR, Switzerland
 Supervisor: Eng. Istvan Albert, Director of SC ROFAROM SRL from Miercurea Ciuc, Romania
 Principal subjects covered: Materials Science and Engineering, Thin Films Thickness
- Oct. 24-25, 2010 **Training for operating Hot isostatic press AIP - 30H performed at INCDIE ICPE-CA headquarter**
 Training organization's name: American Isostatic Presses, Inc., USA
 Supervisor: Eng. Gary Massengill
 Principal subjects covered: Materials Science and Engineering, Powder Metallurgy, Pressing, Sintering
- Sept. 5-9, 2010 **Training for operating Ball/pin-on-disk tribometer (CSM Instruments), Surface Profilometer (Taylor Hobson Surtronic S25) and Compact Platform with micro/nanoindentation and microscratch modules (CSM Instruments) within POSCCE project no. 104-PROMIT Contract 05/01.03.2009, FP7-REGPOT project, Contract 229906/2009**
 Training organization's name: CSM Instruments, Galileo Center, Peseux, Switzerland
 Supervisors: Phillipe Kempe, Sales Manager, and Fanny Ecarla, Tech. Sales Eng.
 Principal subjects covered: Materials Science and Engineering, Tribology, Wear, Profilometry, Micro/nanoindentation, Scratch
- March 9-11, 2010 **Training for operating Spark plasma sintering installation (HP D25, FCT Systeme) performed at INCDIE ICPE-CA headquarter**
 Training organization's name: FCT Systeme GmbH, Germany
 Supervisor: Techn. Manuel Waterstrat
 Principal subjects covered: Materials Science and Engineering, Materials Processing, Powder Metallurgy, Pressing, Sintering, DC Pulses
- October 5-6, 2006 **Training for operating 90 Plus apparatus (Brookhaven) performed at INCDIE ICPE-CA headquarter**
 Training organization's name: Ankersmid Romania, representative of Brookhaven, USA
 Supervisor: Eng. Philip Devereux
 Principal subjects covered: Nanoparticles, Dynamic Light Scattering (DLS), Electrophoretic Light Scattering (ELS)
- December 7-8, 2005 **Training for operating UV-Vis-NIR Spectrophotometer (V570, Jasco) performed at INCDIE ICPE-CA headquarter**
 Training organization's name: Able & Jasco Romania, representative of Jasco, Japan
 Supervisor: Eng. Cristina Lungu
 Principal subjects covered: UV-Vis-NIR Light Absorption Spectroscopy, Diffuse Reflectance Spectroscopy
- Oct. 9-23, 2005 **Training in the materials science and engineering field, performed abroad within the Contract FP6-17240-SSA-INDUMAT**
 Training organization's name: University Carlos III de Madrid (UC3M), Departamento de Ciencia e Ingeniería de Materiales, Leganes, Spain
 Supervisor: Prof. José Manuel Torralba, Head of Departamento de Ciencia e Ingeniería de Materiales
 Principal subjects covered: Materials Science and Engineering, Powder Metallurgy, Electrical Contact Materials

Mother tongue Romanian

Other languages	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C2	C2	C2
Russian	A2	A2	A2	A2	A2

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user
[Common European Framework of Reference for Languages](#)

Communication skills good communication skills

Organisational / managerial skills *Leadership as Head of Multifunctional Metallic Materials Laboratory* (March 2015 - present) (responsible for a team of 9 people);

Project management skills, capacity for synthesis, decision-making skills acquired as Project Director/Responsible and participant in national and international R&D projects:

Project Director (2017-2018) of the project: PN-III-P2-2.1-PED-2016-1987, Contract 118 PED/2017 in the PN-III-CERC-CO-PED-2016 program coordinated by MCI-UEFISCDI, Romania;

Project Director (2014-2017) of the PCCA project PN-II-PT-PCCA-2013-4-1292, Contract 215/2014 in the PNCD II-PARTNERSHIPS program coordinated by MENCS-UEFISCDI, Romania;

Technical Adviser & Responsible (2013-present) for the development and achievement of electrical contact pieces based on Ag-MeO (MeO = CdO, SnO₂, ZnO, a.o.), W-Ag/Cu, WC-Ag/Cu, a.o. from the Electrical Contacts Pilot Station of INCIE ICPE-CA Bucharest within Contracts no. 2070/2017, 2062/2016, 2040/2015, 2053/2014, 2040/2011 with various end-users;

Project Director (2015) of Services Contract no. 2059/2015 with SC Troleibuzul SA, Piatra Neamt; **Project Director** (2014) of Services Contract no. 180/2014 with INCD TURBOMOTOARE COMOTI Bucharest;

Project Director (2006-2008) of CORINT-CEEX/Module III-P-INT-VIZ project-Contract 185/2006;

Project Responsible (2007-2009) of 3 PNCD II research projects - Contract 72/2007 (INNOVATION), Contract 146/2008 (INNOVATION) and Contract 32-168/2008 (PARTNERSHIPS), and in 4 NUCLEUS projects: in 2011-Contract PN 09350104/2009, in 2012 - Contract PN 09350103/2009 - Phase 4/2012, in 2013 - Contract PN 09350103/2009 - Phase 7/2013, in 2014 - Contract PN 09350103/2009 - Phase 1/2014 and Phase 2/2014;

Key Person (2012-2016) in 2 PNCD II-PARTNERSHIPS PCCA projects - Contract 34/2012 and Contract 146/2012;

Participant (2003-2016) in over 32 national research projects;

Participant (2000-2016) in 9 international research projects: NATO SfP (2000-2004)-C974083/2000, bilateral cooperation with IMT Slovenia (2004-2005)-C4131/2003, FP6 SSA (2004-2007)-C17240/2004, FP7-REGPOT (2009-2012)-C229906/2009, Int. Project with Dubna (2012-2014)-Protocol No. 4131-4-12/14, Int. Projects with Dubna (2015-2017), Protocol No. 4446-4-2015/2017 and 4406-4-2015/2017, Topic No. 04-4-1121-2015/2017

Project management skills acquired in two courses: (i) "Management of Research Projects" (1.10.2006-30.11.2006) and (ii) "Assistant Manager" (26.10.2005 – 9.11.2005).

Job-related skills **Development and synthesis of advanced micro/nano materials** by chemical synthesis and mechanical homogenization;

Development and processing of advanced materials by conventional powder metallurgy techniques (pressing-sintering-repressing/extrusion) and special techniques such as spark plasma sintering (FCT HP D25 spark plasma sintering installation) and hot isostatic pressing (AIP6-30H hot isostatic press);

Physical characterization of nanoparticles by light absorption spectroscopy in UV-Vis-NIR (V570 Jasco spectrophotometer), measurements of hydrodynamic diameter of nanoparticles, particle size distribution and zeta potential by DLS and ELS techniques (90 Plus apparatus, Brookhaven);

Tribological characterization (determination of friction coefficient and wear rate) of thin films and bulk solids (ball/pin-on-disk tribometer, CSM Instruments); **Determination of thickness of thin films** by ball cratering method (CALOTEST system, Anton Paar, Switzerland);

Mechanical characterization (determination of Vickers hardness, Young's modulus, elastic contact stiffness and critical loads) of thin films and bulk solids by instrumented micro/nanoindentation techniques and Oliver&Pharr method and microscratch tests (Compact Platform with micro/nano heads and Vickers, Berkovich or Rockwell diamond indenters (CSM Instruments)

Elaboration of RDI project proposals, management and coordination of RDI projects and direct contracts with various end-users, elaboration of technical-scientific reports, elaboration of scientific articles for publication in ISI and BDI ranked journals, elaboration of patent applications

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
Proficient user	Proficient user	Proficient user	Independent user	Independent user

Levels: Basic user - Independent user - Proficient user; [Digital competences - Self-assessment grid](#)

Course of Computer Operator (13.04-4.09.1998), Certificate of graduation No.11447/18.09.1998 issued by the International Computer School, certified by MLSP

Proficient User of Microsoft Office (Word, Excel, PowerPoint, Photo Editor, Access)

Other skills **Business initiation skills** acquired in the course "Developing Entrepreneurial Skills and Business Initiation", organized by the Chamber of Commerce & Industry of Romania (CCIRB-CERPECO) Bucharest, 11-15.07.2005

Pedagogical skills, Certificate series A No. 000343/9.12.1994 issued by the Ministry of Education, UPB

Competence in Investment Area: (i) Member in the Evaluation Commission (2010) for acquiring of an "Equipment for tribological characterization of thin films and bulk solids"; (ii) Member in the Evaluation Commission (2015) for acquiring of a "CVD deposition system for flexible organic systems", (iii) Responsible for acquiring of a "CALOTEST system for single/multilayer thin films thickness measurements" within the Contract No. 215/2014, PNCDI II-PARTNERSHIPS

ADDITIONAL INFORMATION

Publications 117 scientific articles published in specialty journals or reviews, including 26 articles in ISI ranked journals, 15 ISI Proceedings articles, 14 articles in journals indexed in international databases (ISI Web of Knowledge, Scopus, Chemical Abstracts, Google Scholar, EBSCO, a.o.), 67 articles with references to international or national periodicals non-indexed in databases, over 74 communicated scientific papers; 2 books (1 as a single author, 1 as a co-author) and 1 chapter in a book (as a co-author); 9 RO patents granted by the State Office for Inventions and Trademarks (OSIM) and 8 RO patent applications at OSIM

Publications in ISI ranked journals:

- 1) **M.V. Lungu**, E. Vasile, M. Lucaci, D. Pătroi, N. Mihăilescu, F. Grigore, V. Marinescu, A. Brătulescu, S. Mitrea, A. Sobetkii, A. A. Sobetkii, M. Popa, M.-C. Chifiriuc, *Investigation of optical, structural, morphological and antimicrobial properties of carboxymethyl cellulose capped Ag-ZnO nanocomposites prepared by chemical and mechanical methods*, Materials Characterization, Elsevier, ISSN 1044-5803, Vol. 120, October 2016, p. 69-81, DOI: 10.1016/j.matchar.2016.08.022, IF/2016 = 2.714, AIS/2016 = 3.463, <http://www.sciencedirect.com/science/article/pii/S1044580316302728>
- 2) C.D. Cirstea, F. Tolea, L. Leonat, **M. Lungu**, A. Cucos, V. Cirstea, V. Tsakiris, *Characterization of TiNi shape memory alloys obtained by spark plasma sintering process*, Journal of Optoelectronics and Advanced Materials, ISSN: 1454-4164, Vol. 18, Issue: 9-10, Sept.-Oct. 2016, p. 857-862, IF/2015 = 0.383, AIS/2016 = 0.193.
- 3) M.A. Matara, I. Csáki, G. Popescu, M. Lucaci, **M. Lungu**, *Investigation of microstructure and tribological properties of Al/Al₂O₃+Gr hybrid composite*, Journal of Optoelectronics and Advanced Materials, ISSN: 1454-4164, Vol. 17, Issue: 11-12, Nov.-Dec. 2015, p. 1849-1854, IF/2015 = 0.383, AIS/2015 = 0.228.
- 4) P. Moldovan, I. Csaki, G. Popescu, M. Lucaci, **M. Lungu**, M. Butu, *Microstructure evolution and tribological properties for new AlSi9Cu3/5% Gr_{Cu} composite*, Composites Part B: Engineering, Elsevier, ISSN: 1359-8368, Vol.81, Nov. 2015, p. 141-148, DOI: 10.1016/j.compositesb.2015.07.006, IF/2015 = 3.85, AIS/2015 = 2.949
- 5) F. Grigore, **M. Lungu**, D. Tâlpeanu, A. Melinescu, G. Velciu, *Obținerea hidroxiapatitei dense prin sinterizare în plasma de scântei / Obtaining The Dense Hydroxyapatite by Spark Plasma Sintering*, Revista Română de Materiale / Romanian Journal of Materials, ISSN: 1583-3186, Vol. 45, Issue 2, Febr. 2015, p. 155-159, IF/2015 = 0.612, AIS/2015 = 0.185.
- 6) **M. Lungu**, V. Tsakiris, E. Enescu, D. Patroi, V. Marinescu, D. Talpeanu, D. Pavelescu, Gh. Dumitrescu, A. Radulian, *Development of W-Cu-Ni electrical contact materials with enhanced mechanical properties by spark plasma sintering process*, Acta Physica Polonica A, ISSN 0587-4246, Vol. 125, No. 2, Febr. 2014, p. 327-330, DOI: 10.12693/APhysPolA.125.327, IF/2014 = 0.53, AIS/2014 = 0.321 (**7 citations in Google Scholar**).
- 7) V. Tsakiris, **M. Lungu**, E. Enescu, D. Pavelescu, Gh. Dumitrescu, A. Radulian, N. Mocioi, *Nanostructured W-Cu electrical contact materials processed by hot isostatic pressing*, Acta Physica Polonica A, ISSN 0587-4246, Vol. 125, No. 2, Febr. 2014, p. 348-352, DOI: 10.12693/APhysPolA.125.348, IF/2014 = 0.53, AIS/2014 = 0.321.
- 8) **M. Lungu**, S. Gavrilu, E. Enescu, I. Ion, A. Bratulescu, G. Mihaescu, L. Marutescu, M.C. Chifiriuc, *Silver-titanium dioxide nanocomposites as effective antimicrobial and antibiofilm agents*, Journal of Nanoparticle Research, Springer Verlag, ISSN: 1388-0764, Vol. 16, Issue 1, article no. 2203, 15 pages, Jan. 2014, DOI: 10.1007/s11051-013-2203-3, IF/2014 = 2.184, AIS/2014 = 2.061 (**12 citations in Google Scholar**).
- 9) D. Donescu, R. Somoghi, M. Ghiurea, R. Ianchis, C. Petcu, S. Gavrilu, **M. Lungu**, C. Groza, C.R. Ionescu, C. Panzaru, *Aqueous dispersions of silver nanoparticles in polyelectrolyte solutions*, Journal of Chemical Sciences, ISSN: 0974-3626, Vol. 125, No. 2, p. 419-429, March 2013, DOI: 10.1007/s12039-013-0393-y, IF/2013 = 1.224, AIS/2013 = 0.962.

- 10) V. Tsakiris, **M. Lungu**, E. Enescu, D. Pavelescu, G. Dumitrescu, A. Radulian, V. Braic, *W-Cu composite materials for electrical contacts used in vacuum contactors*, Journal of Optoelectronics and Advanced Materials, ISSN 1454-4164, Vol. 15, No. 9-10, Sept.-Oct. 2013, p. 1090-1094, IF/2013 = 0.563, AIS/2013 = 0.284.
- 11) **M. Lungu**, S. Gavriliiu, E. Enescu, M. Lucaci, V. Tsakiris, G. Rimbu, *Properties enhancement of an eco-friendly electrical contact material by silver nanoparticles addition*, Metallurgical and Materials Transactions A, ISSN: 1073-5623, Vol. 43A, Dec. 2012, p. 4464-4469, DOI: 10.1007/s11661-012-1424-x, IF/2012 = 1.627, AIS/2012 = 4.804.
- 12) **M. Lungu**, E. Enescu, F. Grigore, N. Buruntia, M. Lucaci, G. Rimbu, C. Panzaru, C. Ionescu, *Chemical preparation and properties of some high concentrated colloidal silver solutions for antimicrobial applications*, Revue Roumaine de Chimie, ISSN: 0035-3930, Vol. 57, Issues 10-12, Oct.-Dec. 2012, p. 849-855, IF/2012 = 0.331, AIS/2012 = 0.153.
- 13) F. Grigore, **M. Lungu**, D. Savu, M. Radu, G. Velciu, *Elaborarea, caracterizarea și evaluarea biologică a granulelor de fosfat tricalcic / Preparation, characterization and biological evaluation of tricalcium phosphate granules*, Revista Română de Materiale / Romanian Journal of Materials, ISSN 1583-3186, Vol. 42, Issue 2, Febr. 2013, p. 187-192, IF/2012 = 0.610, AIS/2013 = 0.148.
- 14) V. Tsakiris, W. Kappel, E. Enescu, G. Alecu, F. Albu, F. Grigore, V. Marinescu, **M. Lungu**, *Characterization of Al matrix composites reinforced with alumina nanoparticles obtained by PM method*, Journal of Optoelectronics and Advanced Materials, ISSN 1454-4164, Vol. 13, Issue 9, Sept. 2011, p. 1172-1175, IF/2011 = 0.457, AIS/2011 = 0.336.
- 15) S. Gavriliiu, **M. Lungu**, E. Enescu, L. Gavriliiu, *Composite nanopowder for antibacterial textiles*, Revista Industria Textilă, ISSN 1222-5347, Vol. 61 (2), April 2010, p. 86-90, IF/2010 = 0.853, AIS/2014 = 0.199.
- 16) F. Grigore, E. Andronescu, S. Gavriliiu, **M. Lungu**, Ch. Tardei, *Characterizations of the β -TCP suspensions*, Revista de Chimie, ISSN 0034-7752, Vol. 60, No. 10, Oct. 2009, p. 1107-1109, IF/2009 = 0.552, AIS/2011 = 0.125.
- 17) S. Gavriliiu, **M. Lungu**, F. Grigore, N. Buruntia, C. Groza, *New composite powders with high antifungal properties*, Optoelectronics and Advanced Materials-Rapid Communications, ISSN 1842-6573, Vol. 3, Issue 8, Aug. 2009, p. 795-799, IF/2009 = 0.451, AIS/2011 = 0.313.
- 18) S. Gavriliiu, **M. Lungu**, E. Enescu, S. Nitu, D. Patroi, *A comparative study concerning the obtaining and the using of some Ag-CdO, Ag-ZnO and Ag-SnO₂ sintered electrical contact materials*, Optoelectronics and Advanced Materials – Rapid Communications, ISSN 1842-6573, Vol. 3, Issue 7, July 2009, p. 688-692, IF/2009 = 0.451, AIS/2011 = 0.313.
- 19) S. Gavriliiu, **M. Lungu**, E. Enescu, F. Grigore, C. R. Ionescu, *Stable colloidal silver solutions for different applications*, Optoelectronics and Advanced Materials - Rapid Communications (OAM - RC), ISSN 1842-6573, Vol. 3, Issue 6, June 2009, p. 634-637, IF/2009 = 0.451, AIS/2011 = 0.313.
- 20) S. Gavriliiu, **M. Lungu**, F. Grigore, D. Donescu, M. Ghiurea, *Nano/micro silver powders for electronic materials*, Journal of Optoelectronics and Advanced Materials, ISSN 1454-4164, Vol. 10, No. 12, Dec. 2008, p. 3247-3250, IF/2008 = 0.577, AIS/2011 = 0.336.
- 21) A. Petica, S. Gavriliiu, **M. Lungu**, N. Buruntea, C. Panzaru, *Colloidal silver solutions with antimicrobial properties*, Materials Science and Engineering B, Elsevier, ISSN 0921-5107, Vol. 152, Issues 1-3, 25 Aug. 2008, p. 22-27, DOI: 10.1016/j.mseb.2008.06.021, IF/2008 = 1.577, AIS/2011 = 1.064 (**162 citations in Google Scholar**).
- 22) **M. Lungu**, S. Gavriliiu, S. Nitu, T. Canta, D. Sin, P. Budrugeac, D. Patroi, *New Ag-SnO₂-MeO ecological advanced materials for electrical contacts used in electromagnetic contactors*, Journal of Optoelectronics and Advanced Materials, ISSN 1454-4164, Vol. 10, No. 5, May 2008, p. 1064-1068, IF/2008 = 0.577, AIS/2011 = 0.336 (**7 citations in Google Scholar**).
- 23) F. Grigore, Ch. Tardei, E. Andronescu, **M. Lungu**, D. Patroi, *Preparation of macroporous ceramic based on beta - Ca₃(PO₄)₂. Preliminary results*, Journal of Optoelectronics and Advanced Materials, ISSN 1454-4164, Vol.10, No. 4, April 2008, p. 975-977, IF/2008 = 0.577, AIS/2011 = 0.336.
- 24) **M. Lungu**, S. Gavriliiu, T. Canta, M. Lucaci, E. Enescu, *AgSnO₂ Sintered Electrical Contacts with Fine and Uniform Dispersed Microstructure*, Journal of Optoelectronics and Advanced Materials, ISSN 1454-4164, Vol. 8, No. 2, April 2006, p. 576-581, IF/2006 = 1.106, AIS/2011 = 0.336 (**37 citations in Google Scholar**).
- 25) S. Gavriliiu, **M. Lungu**, M. Lucaci, E. Enescu, *New WAg Electrical Contacts with Ultrafine Structure for Low Voltage Devices*, Journal of Optoelectronics and Advanced Materials, ISSN 1454-4164, Vol. 8, No. 2, April 2006, p. 702-707, IF/2006 = 1.106, AIS/2011 = 0.336.
- 26) M. Lucaci, S. Gavriliiu, **M. Lungu**, I. Vida Simiti, I. Roman, *A New Family of Nickel Powder for Electrical Engineering Applications*, Journal of Optoelectronics and Advanced Materials, ISSN 1454-4164, Vol. 6, No. 3, Sept. 2004, p. 947-950, IF/2004 = 1.003, AIS/2011 = 0.336.

Books:

- 1) **M. Lungu**, "Ag-SnO₂ electrical contacts for switching devices", edited by MATRIX ROM, Romania, 2010, 160 pages, ISBN 978-973-755-595-3.
- 2) E. Enescu, **M. Lungu**, S. Gavriliiu, "Treatise of metallic materials science and engineering", Vol. 3 – Metals. Alloys. Special Materials. Composite Materials, Subchapters 20.1-20.4 (Electrical Materials), edited by AGIR, Romania, 2009, p. 1069 – 1113, ISBN 987-973-720-261-1/987-973-720-064-0.
- 3) E. Enescu, **M. Lungu**, S. Gavriliiu, M. Sasu, "Electrical Contacts", edited by PRINTECH, Romania, 2008, 178 pages, ISBN 978-606-521-148-3.

Patents:

- 1) V. Tsakiris, **M.V. Lungu**, E. Enescu, *Process for manufacturing a composite material based on tungsten for electrical contacts*, RO Patent No. 129565 B1 of 30.10.2017.
- 2) V. Tsakiris, E. Enescu, M. Lucaci, G. Alecu, F. Albu, **M.V. Lungu**, F. Grigore, *Process for manufacturing a composite material based on aluminium with alumina nanoparticles*, RO Patent No. 128299 B1 of 30.08.2017.

- 3) F. Grigore, G. Velciu, **M.V. Lungu**, V. Tsakiris, *Process for manufacturing a resorbable material of beta-tricalcium phosphate*, RO Patent No. 125507 B1 of 30.06.2016.
- 4) M. Faur, M. Iordoc, **M.V. Lungu**, V. Tsakiris, L. Leonat, *Tin alloy for anticorrosive coating and process for preparing the same*, RO Patent No. 125773 B1 of 30.03.2016.
- 5) S. Gavriiliu, **M.V. Lungu**, E. Enescu, *Composite nanostructures of silver-metal oxide type with antimicrobial activity and process for preparing the same*, RO Patent No. 126368 B1 of 29.01.2016.
- 6) S. Gavriiliu, **M.V. Lungu**, *Mixtures of silver-metal oxide powders for conductive materials and process for preparing the same*, RO Patent No. 123550 B1 of 30.07.2013.
- 7) R. Gardu, A. Pica, S. Gavriiliu, **M.V. Lungu**, A. Ciocanete, *Emulsion composition based on acrylic polymers with antiseptic and antifungal properties*, RO Patent No. 123470 B1 of 30.08.2012.
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- 1) **M.V. Lungu**, E. Enescu, M. Lucaci, C.D. Cîrstea, D. Tâlpeanu, S. Mitrea, D. Pătroi, A. Brătulescu, M. Marin, P. Godeanu, *Sintered composite materials based on tungsten-copper for obtaining arcing electrical contacts and process for preparing the same*, RO Patent Appl. at OSIM, No. A/01033 of 06.12.2017.
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- 4) **M.V. Lungu**, D. Patroi, F. Grigore, M. Lucaci, D. Talpeanu, V. Tsakiris, S. Mitrea, A. Bratulescu, C.D. Cîrstea, N. Stancu, V. Marinescu, A. Sobetkii, A.A. Sobetkii, M.C. Chifiriuc, M. Popa, *Sputtering targets and thin films made of silver doped zinc oxide antimicrobial nanopowders and process for preparing the same*, RO Patent Appl. at OSIM, No. A/00605 of 20.08.2015.
- 5) C.D. Cîrstea, **M.V. Lungu**, I. Ion, B.G. Sbarcea, N. Stancu, *Semifinished shape memory materials of NiTi type and process for preparing the same*, RO Patent Appl. at OSIM, No. A/00930 of 28.11.2014.
- 6) **M.V. Lungu**, I. Ion, M. Lucaci, D. Talpeanu, V. Marinescu, V. Tsakiris, C.D. Cîrstea, A. Bratulescu, *Functional graded planar junctions and process for preparing the same*, RO Patent Appl. at OSIM, No. A/00581 of 30.07.2014.
- 7) **M.V. Lungu**, I. Ion, V. Tsakiris, E. Enescu, M. Lucaci, F. Grigore, A. Bratulescu, *Process for manufacturing planar junctions of carbonic material-steel type*, RO Patent Appl. at OSIM, No. A/00078 of 23.01.2013.
- 8) M. Lucaci, E. Enescu, **M.V. Lungu**, *Material for hydrogen storage in intermetallic compounds of AB5 type alloy and process for preparing the same*, RO Patent Appl. at OSIM No. A/00744 of 31.10.2012

Oral Presentations

- 1) **M. Lungu** et. al., *Development and investigation of tungsten copper sintered parts for using in medium and high voltage switching devices*, International Conference on Innovative Research ICIR EUROINVENT 2017, May 25-26, 2017, Iasi, Romania
- 2) **M. Lungu** - Invited lecturer at the **Workshop „Wear, erosion and corrosion (tribocorrosion) and their prevention in industry”**, organized by Meda Consulting Company, in 27.05.2015, at Phoenicia Grand Hotel, Bucharest, Romania.
- 3) **M. Lungu**, et al., *Highly concentrated colloidal silver solutions for antimicrobial functionalization of some textiles and leathers*, The 4th TEXTEH International Conference, Textile Research - Active Factor for Increasing Performance and Competitiveness, Bucharest, Romania, June 23-24, 2011.
- 4) **M. Lungu** et. al., *New Ag-SnO₂-MeO ecological advanced materials for electrical contacts used in electromagnetic contactors*, JAPMED'5, 5th Japanese-Mediterranean Workshop on Applied Electromagnetic Engineering for Magnetic, Superconducting and Nano Materials, Sept. 16-19, 2007, Larnaca, Cyprus.

Representative Projects

- 1) **Project Director** (2017-2018) of the experimental demonstration (PED) project: PN-III-P2-2.1-PED-2016-1987 entitled “*Experimental development of high performance sintered parts and validation of their manufacturing technology for utilization in medium and high voltage switching devices*”, Contract 118 PED/2017, funded by MCI-UEFISCDI, co-funded by MAIRA MONTAJ SRL <http://www.icpe-ca.ro/proiecte/proiecte-nationale/pn-2016-2020/hpersint/hpersint.pdf>
- 2) **Project Director** (2014-2017) of the PNCDI II-PARTNERSHIPS PN-II-PT-PCCA-2013-4-1292 project entitled “*Inovative nanostructured materials and coatings with antimicrobial activity for medical applications*”, Contract 215/2014, funded by MENCS-UEFISCDI, co-funded by MGM STAR CONSTRUCT SRL (<http://www.icpe-ca.ro/proiecte/proiecte-nationale/pn-2014/inmatco.pdf>)
- 3) **Key Person** (2012-2016) of the PNCDI II-PARTNERSHIPS PN-II-PT-PCCA-2011-3.2-0357 project entitled “*New vacuum low voltage compact contactor*”, Contract 34/2012, funded by MENCS-UEFISCDI, co-funded by SC ICPE SA Bucharest and SC MEDAPTECH SRL (<https://sites.google.com/site/projectnewalc/Project-NeWaLC>)
- 4) **Key Person** (2012-2016) of the PNCDI II-PARTNERSHIPS PN-II-PT-PCCA-2011-3.1-1422 project entitled “*Direct laser writing of polymer - graphene composites*”, Contract 146/2012, funded by MENCS-UEFISCDI (<http://ppam.inflpr.ro/proiect.htm>)
- 5) **Project Director** (2015) of the Services contract no. **2059/2015** with SC Troleibuzul SA, Piatra Neamt for the “*Achievement of AgCdO₁₂ electrical contact pieces*”.
- 6) **Project Director** (2014) of the Services contract no. **180/2014** with INCD TURBOMOTOARE COMOTI Bucharest for the “*Study on characterization of thin layer deposition bearings*”.

- 7) **Technical Adviser & Responsible** (2011-present) for the development and achievement of electrical contact pieces based on Ag-CdO, Ag-SnO₂, Ag-ZnO, W-Ag/Cu, WC-Ag/Cu, a.o. with different shapes and sizes from the Electrical Contacts Pilot Station of INCDIE ICPE-CA within Contracts no. 2040/2011, 2053/2014, 2040/2015, 2062/2016 for various end-users.
- 8) **Project Responsible** (2012-2014) of the NUCLEUS project entitled "*Composite materials with performant mechanical properties*", Contract PN 09350103/2009: **Phase 1/15.03.2014** "*Steel/carbon hybrid materials for high temperature applications*"; **Phase 2/15.06.2014** "*Steel/DLC hybrid materials with improved mechanical and tribological properties*"; **Phase 7/15.12.2013** "*Realization of experimental models (EM) of advanced composite materials of carbon-steel type by joining method of spark plasma sintering (SPS)*"; **Phase 4/15.12.2012** "*Experimental models of advanced composite materials of carbon-steel type realized by mechanical/physical/chemical junctions*".
- 9) **Project Responsible** (2011) and Participant (2009-2010) of the NUCLEUS project entitled "*Stable allotropic tin alloy at low temperature for coatings*", Contract PN 09350104/2009.
- 10) **Project Responsible** (2011) and Participant (2008-2010) of the PNCDI II-PARTNERSHIPS project entitled "*Breathable superhydrophobic nanostructures*", Contract **32-168/2008**.
- 11) **Project Responsible** (2008-2010) of the PNCDI II-INNOVATION project entitled "*Innovative technologies for obtaining electrical contacts by using equal channel angular extrusion*", C146/2008.
- 12) **Project Responsible** (2007-2009) of the PNCDI II - INNOVATION project entitled "*Realization by thixotropization and direct injection in die of complex pieces for electronic and communications equipment*", Contract 72/2007.
- 13) **Project Director** (2006-2008) of the CORINT-CEEX/Module III-P-INT-VIZ project code 12874/2006 entitled "*Promoting of a partnership for FP7 projects in the field of multifunctional advanced composite micro/nano materials*", Contract 185/2006, funded by the CNMP

Research team member in the following international projects:

- 1) Project with IUCN/JINR Dubna, Russian Federation (2015-2017), Protocol no. 4406-4-2015/2017, *Multifunctional nanocomposites investigations by neutron scattering methods*, funded by the ANCSI.
- 2) Project with IUCN/JINR Dubna, Russian Federation (2015-2017), Protocol no. 4406-4-2015/2017, *Multifunctional nanocomposites*, funded by the ANCSI.
- 3) Project with IUCN/JINR Dubna, Russian Federation (2015-2017), Protocol no. 4446-4-2015/2017, *Microstructural investigation of shape memory alloys by neutron diffraction*, funded by the ANCSI.
- 4) Project with IUCN/JINR Dubna, Russian Federation (2012-2014), Protocol no. 4131-4-2012/2014, Contract 25/2012, *Neutron diffraction study of shape memory alloys*, funded by the ANCSI.
- 5) Project with IUCN/JINR Dubna, Russian Federation (2012-2014), Protocol no. 4141-4-12/14, Contract 27/2012, *Multifunctional conductive nanographite oxide and graphene/PMMA nanocomposites*, funded by the ANCSI.
- 6) Project FP7-REGPOT (2009-2012), Contract 229906/2009, *Developing RDT potential of INCDIE ICPE-CA in the field of hydrogen and fuel cell technologies*, funded by the European Commission.
- 7) Project FP6-SSA-INDUMAT (2004-2007), Contract 17240/2004, *Strengthening of the RDT potential for advanced material and composites to enhance the performance of the electrical industry*, funded by the European Commission
- 8) Bilateral project (2004-2005), Contract 4131/2003 between INCDIE ICPE-CA Bucharest, Romania and IMT Ljubljana, Republic of Slovenia, *Ecological recycling technologies of the fine grained scrapes in the form of slimes wastes resulted from the steel working industry*, funded by the MECT.
- 9) Project NATO SfP (2000-2004), Contract 974083/2000, *Improvement of low voltage vacuum circuit breaker on the basis of vacuum switching electric arc investigation*, funded by the European Commission

Honours and awards

- 1) **National Award granted in Dec. 2017 by UEFISCDI, Romania** for the proposal registration code: PN-III-P1-1.1-PRECBVT2017-0234 for the research results of the patent No. 128299 of 30.08.2017.
- 2) **National Award granted in Dec. 2017 by UEFISCDI, Romania** for the proposal registration code: PN-III-P1-1.1-PRECBVT2017-0081 for the research results of the patent No. 125773 of 30.03.2016.
- 3) **National Award granted in Dec. 2017 by UEFISCDI, Romania** for the proposal registration code: PN-III-P1-1.1-PRECBVT2017-0097 for the research results of the patent No. 126368 of 29.01.2016.
- 4) **National Award granted in Dec. 2017 by UEFISCDI, Romania** for the proposal registration code: PN-III-P1-1.1-PRECBVT2017-0194 for the research results of the patent No. 125507 of 30.06.2016.
- 5) **National Award granted in Dec. 2017 by UEFISCDI, Romania** for the proposal registration code: PN-III-P1-1.1-PRECBVT2017-079 for the research results of the patent No. 129565 of 30.10.2017.
- 6) **Diploma with Gold Medal** at the European Exhibition of Creativity and Innovation EUROINVENT, Ed. 9, 25-27 May 2017, Iasi, Romania for the Patent Application No. A/00605 of 20.08.2015.
- 7) **Diploma of Excellence** granted by the Banat's University of Agricultural Sciences and Veterinary Medicine "King Michael I of Romania" from Timisoara, Romania for the patents presented by INCDIE ICPE-CA at the European Exhibition of Creativity and Innovation EUROINVENT, Ed. 9, 25-27 May 2017, Iasi, Romania, including RO Patent Application No. A/00605 of 20.08.2015.
- 8) **Diploma of Excellence with Gold Medal** at "The International Exhibition of Innovations", PRO INVENT Ed. XV, 22-24.03.2017, Cluj-Napoca, Romania, granted by the Technical University of Cluj-Napoca for the Patent Application No. A/00581 of 30.07.2014.
- 9) **Diploma for Performance in Technical Creativity** granted by the Scientific and Innovation Culture for Performance Foundation „Innovation Romanian Institute – IRIIS” from Iasi, Romania for INCDIE ICPE-CA for the patents presented by INCDIE ICPE-CA at PRO INVENT Ed. XV, 22-24.03.2017, Cluj-Napoca, Romania, including the Patent Appl. No. A/00605 of 20.08.2015 and No. A/00581 of 30.07.2014.
- 10) **Diploma "Outstanding Reviewer Awards 2016 for Materials Research Express in 2016"**, granted by Mr. Jamie Hutchins, Publishing Director of IOP (Institute of Physics) Publishing, Bristol, UK (<http://iopscience.iop.org/journal/2053-1591/page/reviewer2016>)

- 11) **National Award granted in Dec. 2016 by UEFISCDI, Romania** for the proposal registration code: PN-III-P1-1.1-PRECISI-2016-13300 for the research results of the ISI article: **M.V. Lungu**, et. al., "Investigation of optical, structural, morphological and antimicrobial properties of carboxymethyl cellulose capped Ag-ZnO nanocomposites prepared by chemical and mechanical methods", *Materials Characterization*, Elsevier, ISSN 1044-5803, Vol. 120, Oct. 2016, p. 69-81, IF/2019 = 2.714.
- 12) **Diploma of Excellence with Gold Medal with Special Mention** at "The International Exhibition of Innovations", PRO INVENT Ed. XIV, 23-25.03.2016, Cluj-Napoca, Romania, granted by the Technical University of Cluj-Napoca for the Patent No. 125773.
- 13) **National Award granted in Dec. 2015 by UEFISCDI, Romania** for the proposal registration code: PN-II-RU-PRECISI-2015-9-9805 for the research results of the ISI article: P. Moldovan, I. Csaki, G. Popescu, M. Lucaci, **M. Lungu**, M. Butu, Microstructure evolution and tribological properties for new AISi9Cu3/5% Gr_{Cu} composite, *Composites Part B: Engineering*, Elsevier, Vol. 81, Nov. 2015, p. 141-148, DOI: 10.1016/j.compositesb.2015.07.006, IF/2014 = 2.983.
- 14) **Diploma "A resolution of appreciation"** for the communication of the article: V. Tsakiris, E. Enescu, **M. Lungu**, et. al., Electrical contact materials obtained by spark plasma sintering technology for vacuum contactors, 9th Int. Symposium on Advanced Topics in Electrical Eng., 7-9 May 2015, Bucharest, Romania, granted by the Technical Scientific President of the Conference.
- 15) **Diploma of Excellence with Gold Medal** at "The International Exhibition of Innovations", PRO INVENT Ed. XIII, 25-27.03.2015, Cluj-Napoca, Romania, granted by the Technical University of Cluj-Napoca for the Patent Appl. No. A/00078 of 23.01.2013.
- 16) **National Award granted in Dec. 2014 by UEFISCDI, Romania** for the proposal registration code: PN-II-RU-PRECISI-2014-8-6949 for the research results of the ISI article: **M. Lungu**, et. al., Silver-titanium dioxide nanocomposites as effective antimicrobial and antibiofilm agents, *Journal of Nanoparticle Research*, Vol. 16, Issue 1, article no. 2203, 15 pag., Jan. 2014, IF/2013 = 2.278.
- 17) **Diploma of Excellence with Gold Medal** at "The International Exhibition of Innovations", PRO INVENT Ed. XII, 19-21.03.2014, Cluj-Napoca, Romania, granted by the Technical University of Cluj-Napoca for the Patent Appl. No. A/00744 of 31.10.2012.
- 18) **Diploma with Silver Medal** at "The International Exhibition of Inventions and New Technologies - INVENTIKA", Ed. XVI, Bucharest, Romania, 15-18.10.2014, for the Patent Appl. No. A/00078/2013.
- 19) **Diploma with Gold Medal** at "The International Exhibition of Inventions and New Technologies - INVENTIKA", Ed. XVI, Bucharest, Romania, 15-18.10.2014, for the Patent Appl. No. A/00744/2012.
- 20) **Diploma with Silver Medal** at "The International Exhibition of Innovations", PRO INVENT Ed. XII, 19-21.03.2014, Cluj-Napoca, Romania, granted by the Politechnical University of Bucharest for the Patent Appl. No. A/00744 of 31.10.2012.
- 21) **Diploma and Great Prize of the Technical University of Cluj-Napoca** at "The International Exhibition of Innovations", PRO INVENT Ed. XII, 19-21.03.2014, Cluj-Napoca, Romania, granted by the Technical University of Cluj-Napoca for INCDIE ICPE-CA for a group of patents, including the Patent Appl. No. A/00744/2012.
- 22) **Diploma of Excellence with Gold Medal** at "The International Exhibition of Innovations", PRO INVENT Ed. XI, 19-22.03.2013, Cluj-Napoca, Romania, granted by the Technical University of Cluj-Napoca for the Patent Appl. No. A/00942/4.12.2012.
- 23) **National Award granted in Dec. 2012 by UEFISCDI, Romania** for the proposal registration code: PN-II-RU-PRECISI-2012-6-1603 for the research results of the ISI article: **M. Lungu**, et. al. "Properties Enhancement of an Eco-Friendly Electrical Contact Material by Silver Nanoparticles Addition", *Metallurgical and Materials Transactions A*, Vol. 43A, Dec. 2012, p. 4464-4469, IF/2012 = 1.627.
- 24) **Diploma with Bronze Medal** at "The International Exhibition of Inventions and New Technologies - INVENTIKA", Ed. XIV, Bucharest, Romania, 6-9.10.2010, for the Patent Appl. No. A/00365/2010.
- 25) **Diploma with Silver Medal** at "The International Exhibition of Inventions and New Technologies - INVENTIKA", Ed. XIII, Bucharest, Romania, 28-31.10.2009, for the Patent Appl. No. A/00847/2008.
- 26) **Diploma with Silver Medal** at "The 37th International Exhibition of Innovations, New Techniques and Products", Geneva, Switzerland, 1-5.04.2009 for the Patent Appl. No. A/00847 of 3/11/2008.
- 27) **Diploma with Gold Medal** in "The 57th World Exhibition of Innovations, Research and New Technologies", INNOVA, Eureka 2008, Brussels, Belgium, 12-16.11.2008, for the Patent Appl. No. A/00841/2007.
- 28) **Special Prize of the Iranian delegation "Prize of the Iranian FSIE"** to "The World Exhibition of Innovations, Research and New Technologies", INNOVA, Eureka 2008, Brussels, Belgium, 12-16.11.2008, for the Patent Appl. No. A/00841 of 11.12.2007.
- 29) **Diploma with Silver Medal** in "The 57th World Exhibition of Innovations, Research and New Technologies", INNOVA, Eureka 2008, Brussels, Belgium, 12-16.11.2008, for the Patent Appl. No. A/00098/2008.
- 30) **Diploma with Bronze Medal** at "The International Exhibition of Inventions and New Technologies - INVENTIKA", Bucharest, Romania, 7-11.10.2008, for the Patent Appl. No. A/00098 of 6.02.2008.
- 31) **Diploma of Excellence with Silver Medal** at "The International Exhibition of Innovations", PRO INVENT Ed. VI, April 1-4, 2008, Cluj-Napoca, Romania, granted by the Technical Univ. of Cluj-Napoca for the Patent Appl. No. A/00098 of 6.02.2008.
- 32) **Diploma with Gold Medal** at "The 55th World Exhibition of Innovations, Research and New Technologies", EUREKA 2006, Brussels, Belgium, 17-23.11.2006, for the Patent No. 122,445.
- 33) **Diploma of Appreciation** for the work "Metallic Porous Parts for Electronic Devices Cooling", Authors: M. Lucaci, R.L. Orban, G. Soare, **M.V. Lungu**, W. Kappel, presented at The 1st Electronics System Integration Technology Conference, Sept. 5-7, 2006, Dresden, Germany.
- 34) **Diploma of Appreciation** for the work "Electronic cooling using the porous metallic materials", Authors: M. Lucaci, R.L. Orban, **M. Lungu**, E. Enescu, S. Gavrilu, presented at 2006 PM World Congress, Bexco, Busan, Korea.
- 35) **Diploma with Silver Medal** at "The 34th International Exhibition of Innovations, New Techniques and Products", Geneva, Switzerland, 5-9.04.2006 for the Patent No. 122,445.

Memberships Romanian Society of Magnetic Materials - SRMM, in 2003; Alliance for Hydrogen and Fuel Cells-H₂FC, 2005 - 2008; Romanian Society of Biomaterials - SRB, in 2006; Institute of Electrical and Electronics Engineers-IEEE, 2007-2013; International Association of Advanced Materials-IAAM (<http://www.iaamonline.org/>), since Jan. 2017.

Member in Technical Program Committee (TPC):

- 1) **Committee Member** of ICEMEE 2018, The 2018 4th International Conference on Energy Materials and Environment Engineering (ICEMEE 2018), April 13-15, 2018, Shah Alam, Malaysia, (<http://icemee.net/a/com/>)
- 2) **Member in TPC** for The 2nd International Conference on Material Engineering and Application (ICMEA 2015) Oct. 17-18, 2015, Wuhan, China (<http://icmea2015.com/committees.html>)
- 3) **Member in TPC** for 2016 Int. Conf. on Advanced Materials Science and Mechanical Engineering (AMSME2016), March 20-21, 2016, Bangkok, Thailand (<http://www.amsme2016.org/com.htm>)

Member in Editorial Board of different journals:

- 1) Member in **Editorial Board of Open Science Journal** https://osjournal.org/editorial_board.html
- 2) **Member in Editorial Board of Advances in Materials (AM)**; ISSN: 2327-2503, edited by Science Publishing Group <http://www.sciencepublishinggroup.com/journal/editorialboard?journalid=129>
- 3) **Member in Editorial Board of Pyrex Journal of Engineering and Manufacturing Technology (PJET)** <http://pyrexjournals.org/pjemt/editorial-board.php>
- 4) **Member in Editorial Board of MAYFEB Journal of Materials Science**, ISSN 2371-8722, edited by MAYFEB Technology Development, Canada; <http://www.mayfeb.com/OJS/index.php/MAT/about/editorialTeam>

Citations 293 citations & h-index: 7 in Google Scholar; <https://scholar.google.ro/citations?user=kRBDnI8AAAAJ&hl=en>
178 citations & h-index: 5 in Scopus <https://www.scopus.com/authid/detail.url?authorId=24080874500>
194 citations & h-index: 5 in Research Gate, RG Score: 21.59
https://www.researchgate.net/profile/Magdalena_Valentina_Lungu
citing articles without self-citations: 147 & h-index: 5 in Web of Science

- Courses**
- 1) Course "Management of Research Projects", organized in the CEEX-M II Program/Contract 6062 by MCT - National School of Political and Administrative Studies, 1.10.2006-30.11.2006; Certificate No. A 0041/12.12.2007;
 - 2) Summer School "Nanosciences & Nanotechnologies" NN07, 14-20 July, 2007, Aristotle University, Faculty of Physics, Thessaloniki, Greece
 - 3) Course "Assistant Manager" organized by AMCSIT-Polytechnic, 26.10.2005-9.11.2005, Diploma No. 5/14.11.2005 attested by the Ministry of Labor, Social Solidarity and Family and by the Ministry of Education and Research.
 - 4) Course „New Experimental Approaches in Magnetism”-European School of Magnetism, Constanta, 7-16 Sept., 2005

Expert-Evaluator / Reviewer/ Rapporteur

Expert-Evaluator / Reviewer/ Rapporteur participating in the evaluation of RTD proposals:

- 1) **Reviewer** of a Grant application for BSAC (British Society for Antimicrobial Chemotherapy) from UK, in January 2017;
- 2) **Expert-Reviewer/Rapporteur** for evaluation of some bilateral, mobility project proposals within the National Research, Development and Innovation Plan **PNCDI III Programme, SP 3.1, Bilateral Romania-France 2016 call (BRÂNCUȘI Integrated Actions Program) (RO-FR-2016)**, coordinated by the Executive Agency for Higher Education, Research, Development and Innovation Funding (UEFISCDI) from Romania, in August 2016.
- 3) **Expert-Remote Evaluator** for evaluation of some project proposals within the **H2020-FETOPEN-1-2016-2017** call, coordinated by the Research Executive Agency (REA) delegated by the European Commission from Brussels, Belgium, in June-July 2016.
(http://ec.europa.eu/research/participants/data/ref/h2020/experts_lists/excellent/fet/h2020-expertslists-excellent-fet-2016_en.xlsx)
- 4) **Expert-Reviewer** for evaluation of some bilateral, mobility project proposals within the National Research, Development and Innovation Plan **PNCDI III Programme, SP 3.1, Bilateral Romania-Moldova 2016 call (RO-MD-2016)**, coordinated by the UEFISCDI from Romania, in May 2016.
- 5) **Expert-Reviewer/Rapporteur** for evaluation of some project proposals within **Human Resources Programme, "Young research teams" (RU-TE-2015) Subprogram** coordinated by the UEFISCDI from Romania, in April-July 2015

Reviewer:

- 1) Journal of Applied Polymer Science, Wiley, ISSN: 1097-4628 (IF/2014 = 1.64), from 2011
- 2) Analytical Methods-UK, Royal Society of Chemistry, ISSN: 1759-9660 (IF/2014 = 1.821), from 2012
- 3) RSC Advances, Royal Society of Chemistry, ISSN: 2046-2069 (IF/2014 = 3.84), from 2013
- 4) Journal of Nanoparticle Research, Springer, ISSN: 1388-0764 (IF/2014 = 2.184), from 2013
- 5) Applied Surface Science, Elsevier, ISSN: 0169-4332 (IF/2014 = 2.711), from 2013
- 6) Physical Sciences Research International, ISSN: 2348-0130, Science Domain Int., from 2013
- 7) Proceedings of The 3rd International Conference on Biomedical Engineering and Biotechnology (ICBEB) Beijing, China (<http://paper.academicconf.com/reviewers.aspx?confname=icbeb2014>), in 2014
- 8) Journal of Inorganic and Organometallic Polymers and Materials, Springer, ISSN: 1574-1443 (IF/2014=1.16), from 2014
- 9) Materials Research Express, IOP Publishing, ISSN: 2053-1591 (IF/2015 = 0.968), from 2014
- 10) Metallurgical and Materials Transactions A, Springer, ISSN: 1073-5623 (IF/2014 = 1.73), from 2014

- 11) CrystEngComm, Royal Society of Chemistry, ISSN: 1466-8033 (IF/2014 = 4.034), from 2014
- 12) Journal of Physics D: Applied Physics, IOP Publishing, ISSN: 0022-3727 (IF/2014 = 2.721), from 2014
- 13) Biomedical Materials, IOP Publishing, ISSN: 1748-6041 (IF/2014 = 3.697), from 2015
- 14) Advanced Materials Research, Trans Tech Publications Inc., ISSN: 1022-6680, from 2015
- 15) New Journal of Chemistry, Royal Society of Chemistry, ISSN: 1144-0546 (IF/2014 = 3.086), from 2015
- 16) Nanotechnology, IOP Publishing, print ISSN: 0957-4484 (IF/2014 = 3.821), from 2015
- 17) Chemical Industry & Chemical Engineering Quarterly (Chem. Ind. Chem. Eng. Q.), Belgrade, Serbia, ISSN: 1451-9372 (IF/2014 = 0.659), from 2015
- 18) Optoelectronics and Advanced Materials-Rapid Communications, ISSN:1842-6573 (IF/2014=0.449), from 2015
- 19) International Journal of Nanomedicine, Dove Medical Press, ISSN:1176-9114 (IF/2014=4.383), from 2015
- 20) Journal of Alloys and Compounds, Elsevier, ISSN: 0925-8388 (IF/2014 = 2.999), from 2015
- 21) Acta Biomaterialia Odontologica Scandinavica, Taylor&Francis, ISSN: 2333-7931, from 2015.
- 22) Science and Engineering of Composite Materials (SECM), De Gruyter, ISSN: 2191-0359 (IF/2015 = 0.515), from 2016
- 23) Tribology International, Elsevier, ISSN: 0301-679X (IF/2016 = 2.259), from 2017.
- 24) Indian Journal of Engineering & Materials Sciences, from 2017.
- 25) Acta Chimica Slovenica (ACSi), ISSN: 1580-3155, from 2017.
- 26) Transactions of Nonferrous Metals Society of China (TNMSC), ISSN: 1003-6326 (IF/2016=1.34), from 2017.
- 27) Advances in Materials (AM), Science Publishing Group ISSN: 2327-2503, from 2017.
- 28) Journal of Advanced Research, Elsevier, ISSN: 2090-1232, from 2017.
- 29) Applied Organometallic Chemistry (AOC), John Wiley & Sons Ltd, Online ISSN: 1099-0739 (IF/2016 = 2.319), from 2017.

Other information Included as inventor in Dictionary of Romanian contemporary inventors, Vol. II, 2010, Coordinator E.C. Stanciu, Ed. Risoprint, Cluj-Napoca, Romania; Included as researcher in publication Who is Who in Romania, 8th Ed., 2013; Included as researcher in publication Who is Who in the World, 33rd Ed., 2016

Date: January 5th, 2018

Dr. Eng. Lungu Magdalena-Valentina

