PERSONAL INFORMATION

Magdalena-Valentina LUNGU

(surname before marriage: RUSU)

National Institute for Research and Development in Electrical Engineering ICPE-CA (INCDIE ICPE – CA) Bucharest, Romania
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Sex: Female | Date of birth: 5 March 1971 | Nationality: Romanian

WORK EXPERIENCE

Nov. 2004 – present

Senior researcher, CS I from Dec. 2015 (Ministry Order no. 6006 of Dec. 18th, 2015), CS II from Sept. 2011, IDT II from Jan. 2009, CS III from Jan. 2007, CS from July 2002), Ph.D. in Materials Science and Engineering from 2008;
Research & Development (R&D) experience of over 25 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 Metallic, Composite and Polymeric Materials Department** (Oct. 2018 – present);
- **Head of Multifunctional Metallic Materials Laboratory** (March 2015 – Oct. 2018);
- **Member in Scientific Body** (June 2020 - present) and **Advisory Body** of INCDIE ICPE-CA for approval of technical stage reports of some R&D projects (March 2015 - present); **Technical Advisor** (Jan. 2021 - present), **Technical Responsible** (2013 - Jan. 2021) and **Head of Process Development and Quality Assurance** (2011 - 2013) of electrical contact pieces of Ag-CdO, Ag-SnO_2, Ag-ZnO, W-Ag/Cu, WC-Ag/Cu, a.o. from the Electrical Contact Pilot Station of INCDIE ICPE-CA;
- **Studies and experimental researches** on the development of:
  - metal oxide varistors (MOVs) based on ZnO or SnO_2 by classical powder metallurgy (PM) techniques or spark plasma sintering (SPS);
  - antiwear coatings (TiN, AlN, TiAlN, TiSi, TiCr, TiAlSi, TiAlCr) by physical vapor deposition (PVD) methods such as magnetron sputtering;
  - electrical contact pieces based on W-Cu/Ag, W-Cu additivated with graphene oxide (GO), WC-Cu/Ag by powder metallurgy (PM) techniques: pressing-sintering-infiltration or repressing (P-S-I or P-S-R) or spark plasma sintering (SPS);
  - High Entropy Alloys (HEA) and Advanced High Strength Steels (AHSS);
  - sputtering targets of metallic (Ag, Cu, Al, Ti, TiAl, TiSi, TiCr, TiAlSi, TiAlCr), ceramic (ZnO, TiO_2) and metal-ceramic (Ag-ZnO, Ag-TiO_2) by spark plasma sintering (SPS);
  - electrical contact pieces of Ag-MeO (MeO = CdO, SnO_2, ZnO), Ag-AgNPs/MeO, W-Ag/Cu, Ag-C, Ag-Ni, Ag-Ni-C, a.o. types by classical PM techniques (P-S-I or P-S-R) or spark plasma sintering;
  - antimicrobial nanostructured materials and coatings (Ag, ZnO, TiO_2, Ag-ZnO, Ag-TiO_2) by physical and chemical methods;
  - planar junctions of dissimilar materials (steel and carbonic materials) by spark plasma sintering (SPS) using Ni alloys or hot soldering Sn alloys;
  - electrode materials for NiMH batteries;
  - colloidal Ag solutions and suspensions of Ag-SnO_2, Ag-TiO_2, Ag-ZnO, a.o. by chemical synthesis;
  - nanostructured composites (i.e. Ag-TiO_2, Ag-ZnO) for use in the textile and leather industry;
  - ceramic structures (ZnO, TiO_2, HAP, β-TCP) doped with AgNPs;
  - stable allotropic Sn-Cu-Ti and Sn-Bi-Sb alloys at low temperatures for anticorrosive coating and soft soldering;
  - Al or Mg light alloys by thixotropization of the alloy in a semisolid state and injection in a die.
- **Characterization** of nanoparticles (NPs), elemental and composite powders (i.e. AgNPs/SnO_2, TiO_2, ZnO, $BaSO_4$, etc.) by UV-Vis-NIR spectroscopy, Dynamic/Electrophoretic Light Scattering (DLS/ELS);
- **Characterization** of thin films, coatings and bulk solids by instrumented indentation technique (IIT) by micro/nanoindentation and Oliver&Pharr method (stiffness, hardness, Young's modulus, creep, a.o.), Martens hardness, microscratch tests (critical loads), tribological tests (friction coefficient, wear rate), determination of coatings/thin films thickness by "ball cratering" method.
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 the 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, 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 obtaining of some new types of Ag-SnO_2 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, license overall average: 9.43**
Education organization's name: University Politechnica of Bucharest (UPB), Romania
Faculty of Mechanical Engineering, Romania
Principal subjects covered: Mechanical Engineering

Nov. 7-8, 2019 Training for operating a MySint100 RM (reactive materials) 3D printer performed at the headquarter of INCDIE ICPE-CA Bucharest, Romania within the Contract 30 PFE/2018
Training organization' names: SISMA S.p.A, Italy & SC Nutechnologies SRL, Romania
Supervisors: Roberto Gramola, After Sales Service Techn. Additive Manufacturing & Eng. Ovidiu Crivac
Principal subjects covered: Materials Science and Engineering, Additive Manufacturing

June 1, 2016 Training for operating a CALOTEST system performed at the headquarter of INCDIE ICPE-CA Bucharest, Romania within the PNCD II - PARTNERSHIPS PCCA project - Contract 215/2014
Training organization's name: Anton Paar, Switzerland / SC ROFAROM SRL, Miercurea Ciuc, Romania
Supervisor: Eng. Istvan Albert, Director of SC ROFAROM SRL from Miercurea Ciuc, Romania
Principal subjects covered: Materials Science and Engineering, Thin Films Thickness

Febr. 22 - March 9, 2012 Training in the field of Active Materials for Electrochemical Batteries and Fuel Cells performed at the headquarter of Kyiv National University of Technologies and Design (KNUTD), and the Institute for Problems of Materials Science (IPMS) of the National Academy of Sciences of Ukraine, Kyiv, Ukraine within the FP7-REGPOT project, Contract 229906/2009
Training organization's name: The Department of Electrochemical Power Engineering & Chemistry at Kiev National University of Technologies and Design, and the Institute of Materials Science Problems of the Ukrainian National Academy of Sciences, Kiev, Ukraine
Supervisor: Prof. Dr. Viacheslav Barsukov, Head of Department of Electrochemical Power Engineering & Chemistry at Kyiv National University of Technologies and Design, Kyiv, Ukraine
Principal subjects covered: Active Materials for Electrochemical Batteries and Fuel Cells

Oct. 24-25, 2010 Training for operating an AIP-30H Hot Isostatic Press performed at the headquarter of INCDIE ICPE-CA Bucharest, Romania
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 a Ball/Pin-on-Disk Tribometer (CSM Instruments), Surface Profilometer (Taylor Hobson Surtronic S25) and Compact Platform with micro/nanoindentation and microscratch modules (CSM Instruments) performed at the headquarter of CSM Instruments, Peseux, Switzerland 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 a Spark Plasma Sintering installation (HP D25, FCT Systeme, Germany) performed at the headquarter of INCDIE ICPE-CA Bucharest, Romania
Training organization's name: FCT Systeme GmbH, Germany
Supervisor: Tech. Manuel Waterstrat
Principal subjects covered: Materials Science and Engineering, Materials Processing, Powder Metallurgy, Pressing, Sintering, DC Pulses

Oct. 5-6, 2006 — Training for operating a 90 Plus apparatus (Brookhaven, USA) performed at the headquarter of INCDIE ICPE-CA Bucharest, Romania
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)

Dec. 7-8, 2005 — Training for operating a UV-Vis-NIR Spectrophotometer (V570, Jasco, Japan) performed at the headquarter of INCDIE ICPE-CA Bucharest, Romania
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 field of Materials Science and Engineering performed at the headquarter of University Carlos III de Madrid (UC3M), Leganes, Spain 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

PERSONAL SKILLS

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

Soft skills

Problem-solving skills (Attention to detail, Collaboration, Communication, Patience, Research, Logical thinking), ***Computer skills*** (Typing/Word processing, Spreadsheets, E-mail management), ***Customer service skills*** (Active listening, Empathy, Interpersonal skills, Problem-solving, Reliability, Confidentiality), ***Interpersonal skills*** (Communication, Empathy, Flexibility, Leadership, Patience)**,** ***Communication skills*** (Active listening, Interpersonal communication, Public speaking, Verbal and written communication), ***Leadership skills*** (Ability to teach and mentor, Flexibility, Risk-taking, Team building, Time management), ***Management skills*** (Time-management, Resource management), ***Transferable skills*** (Ambition, Creativity, Empathy, Leadership, Teamwork), ***Motivation skills*** (Career progress, Responsibility, Achievement, Recognition of hard work, Performance management, Working conditions)

Organisational / managerial skills

Team Leadership as the Head of Metallic, Composite and Polymeric Materials Department (Oct. 2018 – present) (responsible for a team of 17 people) and ***Head of Multifunctional Metallic Materials Laboratory*** (March 2015 – Oct. 2018) (responsible for a team of 11 people);
Project Management Skills (Capacity for synthesis, Decision-making skills, Project planning, Task delegation, Team communication, Team leadership), ***Time Management Skills*** (Goal Setting, Focus, Organization, Prioritization, Delegating tasks), ***Resource Management Skills*** acquired as a ***Project Director/Responsible and participant in national and international R&D projects***:
Project Director (2020-2022) of the project: PN-III-P2-2.1-PED-2019-5337, Contract 327 PED/2020 in the PN-III-CERC-CO-PED-2019 program coordinated by UEFISCDI, Romania, co-funded by MAIRA MONTAJ SRL, Romania;
Project Responsible (2019-2022) of the project no. PN 19310102/2019, Contract 46N/2019, in the NUCLEUS (CORE) program coordinated by MCI, Romania;
Project Responsible (2019-2022) of a POC type D project (effectively collaborative research between a R&D organization and an industrial end-user), Contract POC 133-D6 MAIRA/2019 within the Competitivity Operational Program (POC), co-funded by the European Union through the European Regional Development Fund (ERDF) and SC MAIRA MONTAJ SRL, Romania;
Project Responsible (March-Sept. 2018) of the PN 1824 0101/2018 project, Contract 35N/2018, in the NUCLEUS (CORE) program coordinated by MCI, Romania;
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 UEFISCDI, Romania, co-funded by MAIRA MONTAJ SRL, 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, co-funded by SC MGM STAR CONSTRUCT SRL, Romania;

Technical Adviser & Responsible (2013-present) for the development and achievement of electrical contact pieces based on Ag-MeO (MeO = CdO, SnO_2, ZnO, a.o.), W-Ag/Cu, WC-Ag/Cu, a.o. from the Electrical Contacts Pilot Station of INCDIE ICPE-CA Bucharest within Contracts no. 2079/2019, 2070/2017, 2062/2016, 2040/2015, 2053/2014, 2040/2011 with various Romanian industrial end-users (SC ELECTROAPARATAJ SA, SC MAIRA MONTAJ SRL, SC SATURN SA Alba Iulia, SC S&M EXIM SRL, SC ICPE SA, SC ELECTROAPARATAJ TRACTIUNE SRL, SC NEW WAVE PREST SRL, a.o.) (responsible for a team of 4-6 people);
Project Responsible (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 2 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 34 national research projects;
Participant (2000-2017) in 12 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 (2015-2018), Protocol No. 4446-4-2015/2017, 4406-4-2015/2017, Topic No. 04-4-1121-2015/2017, Protocol No. 02-1-1107-2011/2019, and 04-4-1121-2015/2020
Project management skills acquired in two courses: (i) ”Management of Research Projects” (01.10.2006 - 30.11.2006) and (ii) ”Assistant Manager” (26.10.2005 - 09.11.2005).

Job-related skills / Hard & Soft skills

Development and synthesis of advanced micro/nanomaterials 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, and video microscope with 5x, 20x, 50x and 100x objectives, CSM Instruments, Switzerland);
Elaboration of RDI project proposals, management, and coordination of RDI projects and direct contracts with various industrial end-users
Elaboration of technical-scientific and financial reports on stages and final reports
Elaboration of scientific papers for publication in peer-reviewed journals
Elaboration of patent applications

Digital competence

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)

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. 000343/09.12.1994 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

Publications

119 scientific papers published in specialty journals or reviews, including **40 papers in peer-reviewed journals (ISI ranked journals) with impact factor (IF)** (11 ISI articles as first author & 12 ISI articles as corresponding author), **37 papers in peer-reviewed journals indexed in international databases (IDB)** (8 IDB articles as first author & corresponding author) (IDB: ISI Web of Knowledge, Scopus, Chemical Abstracts, Google Scholar, Engineering Village, Compendex, ProQuest, ProQuest-Ulrich's Periodical Directory, Ebsco, Index Copernicus, a.o.), and **42 papers** in journals non-indexed in IDB (7 articles as first author & corresponding author); **24 publications in peer-reviewed Book of Abstracts,** over **80 presentations at international conferences**; **2 books** (1 as a single author, 1 as a co-author) and **1 chapter in a book** (as a co-author); **awards: 60**
17 RO patents granted by the State Office for Inventions and Trademarks (OSIM) and **7 RO patent applications** submitted to OSIM.

Publications in peer-reviewed journals (ISI ranked journals) with impact factor (IF):

1) **M.V. Lungu**, D. Pătroi, V. Marinescu, A. Caramitu, M. Marin, D. Tălpeanu, M. Lucaci, P. Godeanu, *Preparation and study of the optical, electrical and dielectric characteristics of some disc-shaped tin dioxide-based varistors*, Accepted paper in May 2022, in press, Romanian Journal of Physics, ISSN: 1221-146X, Vol. 67, Issues 7-8, 610, Aug. 2022, https://rjp.nipne.ro//2022_67_7-8/RomJPhys.67.610.pdf, IF/2021 = 1.662.
2) V. Tsakiris, D. Tălpeanu, **M.V. Lungu**, D. Pătroi, G.B. Sbârcea, V.E. Marinescu, *Improving the physical-mechanical and structural characteristics of Mg-Zn-(Mn) alloys obtained by SPS technique*, Romanian Journal of Materials, ISSN 1583-3186, July 2022, Vol. 52, Issue 2, p. 168–176, https://solacolu.chim.upb.ro/pg168-176.pdf, IF/2021 = 0.563.
3) **M.V. Lungu**, A. Barbu, *Graphene and its derivative reinforced tungsten–copper composites for electrical contact applications: A review*, Journal of Reinforced Plastics and Composites, ISSN 0731-6844, Accepted paper in April 2022, Vol. 41, Issues 15-16, p. 624–636, Aug. 2022, https://doi.org/10.1177/07316844211063869, IF/2021 = 3.383.
4) E. Manta, M. Lucaci, E. Vasile, **M.V. Lungu**, D. Tălpeanu, N. Stancu, A. Iorga, Influence of processing route on microstructure and properties of $Al_{13.45}$FeCrNiCo high entropy alloys, Journal of Alloys and Compounds, ISSN 0925-8388, Vol. 907, 2022, 164457, https://doi.org/10.1016/j.jallcom.2022.164457, IF/2021 = 6.371.
5) E.-M. Lungulescu, R. Setnescu, E.A. Pătroi, **M.V. Lungu**, D. Pătroi, I. Ion, R.-C. Fierăscu, R. Șomoghi, M. Stan, N.-O. Nicula, *High-efficiency biocidal solution based on radiochemically synthesized Cu-Au alloy nanoparticles*, Nanomaterials, ISSN: 2079-4991, Dec. 2021, Vol. 11, 3388, https://doi.org/10.3390/nano11123388, IF/2021 = 5.076.
6) C.A. Manea, M. Sohaciu, R. Stefănoiu, M.I. Petrescu, **M.V. Lungu**, I. Csaki, *New HfNbTaTiZr high-entropy alloy coatings produced by electrospark deposition with high corrosion resistance*, Materials, ISSN: 1996-1944, Aug. 2021, Vol. 14, 4333, https://doi.org/10.3390/ma14154333, IF/2020 = 3.623.
7) D. Tălpeanu, **M.V. Lungu**, D. Pătroi, A. Cojocaru, *Influenţa temperaturii de sinterizare asupra proprietăţilor unor materiale titan-hidroxiapatită sinterizate în plasmă cu scânteie / Influence of sintering temperature on the properties of some spark plasma sintered titanium-hydroxyapatite*, Revista Română de Materiale / Romanian Journal of Materials, ISSN 2457-502X, June 2021, Vol. 51, Issue 2, p. 169-177, https://solacolu.chim.upb.ro/pg169-177.pdf, IF/2020 = 0.542.
8) D. Tălpeanu, **M.V. Lungu**, A. Cojocaru, D. Pătroi, V.E. Marinescu, *Studiul unor materiale ceramice poroase pe bază de hidroxiapatită ca substitute osoase pentru cranioplastie / Study on porous hydroxyapatite based ceramic materials as bone substitutes for cranioplasty*, Revista Română de Materiale / Romanian Journal of Materials, ISSN 2457-502X, June 2021, Vol. 51, Issue 2, p. 178-185, https://solacolu.chim.upb.ro/pg178-185.pdf, IF/2020 = 0.542.
9) C.D. Cirstea, M. Lucaci, M. Valeanu, M. Sofronie, L.G. Bujoreanu, **M.V. Lungu**, V. Tsakiris, A. Cucos, D. Tălpeanu, E. Enescu, *Studies about structural and thermal investigations on Ti50Ni30Cu20 alloys obtained by different technological processes*, Romanian Journal of Physics, ISSN: 1221-146X, 2021, Vol. 66, Nr. 3-4, 601, https://rjp.nipne.ro/2021_66_3-4/RomJPhys.66.601.pdf, IF/2020 = 1.888.
10) A. Iorga, M. Lucaci, **M. Lungu**, E. Vasile, M. Straticiuc, I. Burducea, V. Marinescu, D. Talpeanu, G. Sbarcea, N. Stancu, E. Manta, M. Marin, D. Cirstea, I. Ion, *Advanced high strength steel (AHSS) alloys processed by powder metallurgy techniques*, Romanian Journal of Physics, ISSN: 1221-146X, Jan. 2021, Vol. 66, Nr. 1-2, 903, http://www.nipne.ro/rjp/2021_66_1-2/RomJPhys.66.903.pdf, IF/2020 = 1.888.
11) L. Burlibașa, M.C. Chifiriuc, **M.V. Lungu**, E.M. Lungulescu, S. Mitrea, G. Sbarcea, M. Popa, L. Măruţescu, N. Constantin, C. Bleotu, A. Hermenean, *Synthesis, physico-chemical characterization, antimicrobial activity and toxicological features of Ag-ZnO nanoparticles*, Arabian Journal of Chemistry, ISSN: 1878-5352, Febr. 2020, Vol. 13, Issue 2, p. 4180-4197, https://doi.org/10.1016/j.arabjc.2019.06.015, IF/2019 = 4.762.
12) **M.V. Lungu**, E. Enescu, D. Tălpeanu, D. Pătroi, V. Marinescu, A. Sobetkii, N. Stancu, M. Lucaci, M, Marin, E. Manta, *Enhanced metallic targets prepared by spark plasma sintering for sputtering deposition of protective coatings*, Materials Research Express, ISSN: 2053-1591, IOP Publishing, April 2019, Vol. 6, Issue 7, article no. 076565, https://doi.org/10.1088/2053-1591/ab178f, IF/2019 = 1.914.
13) **M.V. Lungu**, A. Sobetkii, A.A. Sobetkii, D. Pătroi, P. Prioteasa, I. Ion, C.C. Negrilă, M.C. Chifiriuc,

Functional properties improvement of Ag-ZnO thin films using Inconel 600 interlayer produced by electron beam evaporation technique, Thin Solid Films, ISSN: 0040-6090, Elsevier, Dec. 2018, Vol. 667, p. 76-87, https://doi.org/10.1016/j.tsf.2018.09.055, IF/2018 = 1.888.

14) I. Csaki, K.R. Ragnasdottir, A. Buzaianu, K. Leosson, V. Motoiu, S. Guðlaugsson, **M.V. Lungu**, H.O. Haraldsdottir, S.N. Karlsdottir, *Nickel based coatings used for erosion-corrosion protection in a geothermal environment*, Surface & Coatings Technology, ISSN: 0257-8972, Elsevier, Sept. 2018, Vol. 350, p. 531-541, https://doi.org/10.1016/j.surfcoat.2018.07.029, IF/2018 = 3.192.

15) **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, ISSN 1044-5803, Oct. 2016, Vol. 120, p. 69-81, https://doi.org/10.1016/j.matchar.2016.08.022, IF/2016 = 2.714.

16) 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, Sept.-Oct. 2016, Vol. 18, No. 9-10, p. 857-862, IF/2016 = 0.449.

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18) 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, ISSN: 1359-8368, Elsevier, Nov. 2015, Vol. 81, p. 141-148, https://doi.org/10.1016/j.compositesb.2015.07.006, IF/2015 = 3.850.

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11) F. Grigore, G. Velciu, **M.V. Lungu**, V. Tsakiris, *Process for manufacturing a resorbable material of*

beta-tricalcium phosphate, RO Patent No. 127170 B1 of 30.06.2016.

12) 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.

13) S. Gavriliu, **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.

14) S. Gavriliu, **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.

15) R. Gardu, A. Pica, S. Gavriliu, **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.

16) F. Grigore, S. Gavriliu, **M.V. Lungu**, *Advanced ceramic nanocomposite for bone reconstruction and process for preparing the same*, RO Patent No. 125507 B1 of 30.09.2011.

17) S. Gavriliu, **M.V. Lungu**, E. Enescu, M. Lucaci, *Process for manufacturing sintered electrical contacts made of silver-tin oxide with optimized microstructure*, RO Patent No. 122445 B1 of 30.06.2009.

Patent Applications submitted to OSIM:

1) M. Lucaci, **M.V. Lungu**, D. Tălpeanu, V. Tsakiris, C.D. Cîrstea, V. Marinescu, *Process for obtaining a high entropy mechanocomposite alloy powder from the Al-Co-Cr-Fe-Ni system,* RO Patent Appl. at OSIM, No. A/00778 of 10.12.2021.

2) **M.V. Lungu**, C.D. Cîrstea, M. Marin, D. Tălpeanu, A. Caramitu, D. Pătroi, V. Marinescu, G.B. Sbarcea, C.A. Manea, P. Godeanu, A. Barbu, *Process for obtaining some disc-shaped zinc oxide varistors*, RO Patent Appl. at OSIM, No. A/00741 of 06.12.2021.

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4) **M.V. Lungu**, D. Tălpeanu, D. Pătroi, M. Lucaci, V. Tsakiris, M. Marin, *Sputtering targets based on titanium-aluminium and titanium-silicium for wear resistant hard coatings and process for preparing the same*, RO Patent Appl. at OSIM, No. A/00703 of 05.11.2020.

5) **M.V. Lungu**, I. Ion, D. Tălpeanu, D. Pătroi, M. Marin, V.E. Marinescu, B.G. Sbarcea, M. Lucaci, P. Godeanu, A. Barbu, *Electrical contact materials based on tungsten-copper-graphene oxide and process for preparing the same*, RO Patent Appl. at OSIM, No. A/00276 of 21.05.2020.

6) I. Ion, **M.V. Lungu**, N.O. Nicula, V.E. Marinescu, C.M. Mitu, *Biosynthesized silver nanoparticles and process for preparing the same,* RO Patent Appl. at OSIM, No. A/00902 of 16.11.2018.

7) **M.V. Lungu**, E. Enescu, P. Godeanu, C. Melnic, D. Pătroi, M. Lucaci, M. Marin, A. Brătulescu, *Tungsten-copper-nickel composite materials and process for preparing the same for obtaining arcing electrical contacts used in medium and high voltage switching devices*, RO Patent Appl. at OSIM, No. A/00472 of 27.06.2018.

Oral & Poster Presentations at international conferences (selection)

Oral Presentation:

1) **M.V. Lungu** et. al., *Study of disc−shaped ZnO based varistors doped with V_2O_5, Sb_2O_3, Co_3O_4, SnO_2, and Cr_2O_3,* International Conference on Applied Sciences ICAS2022, 25-28 May 2022, University of Banja Luka, Faculty of Mechanical Engineering, Banja Luka, the Republic of Srpska, Bosnia and Herzegovina.

2) **M.V. Lungu** et. al., *Reliable tungsten-copper arcing contacts for high voltage circuit breaker applications,* The first International Conference on Electrical Engineering ICPE-CA, ASMES'2019 - Advanced Structures, Materials and Electrical Systems, 20-22 Nov. 2019, Predeal, Romania.

3) **M. Lungu** et. al., *High Performance Tungsten Copper Materials Produced by Spark Plasma Sintering for Using as Arcing Contacts in Power Circuit Breakers*, 4th International Workshop on Spark Plasma Sintering, May 23-25, 2018, Cagliari, Italy.

4) **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.

5) **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.

6) **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.

7) **M. Lungu,** et. al., *New Ag-SnO_2-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.

Poster Presentation - selection:

1) **M.V. Lungu**, et. al., *Advanced Ti-Al-N wear resistant coatings produced by reactive DC magnetron sputtering*, 2nd International Conference on Emerging Technologies in Materials Engineering EmergeMAT 06-08 Nov. 2019, Bucharest, Romania.

2) **M.V. Lungu**, et. al., *Fast consolidation of Ti, Al and Ti-Al powders by spark plasma sintering to obtain highly dense sputtering targets for thin films deposition,* 1st International Conference on Emerging Technologies in Materials Engineering - EmergeMAT and the 4th International Workshop

on Materials under Extreme Conditions, 14-16 Nov. 2018, Bucharest, Romania.

3) **M.V. Lungu**, et. al., *Tribological behavior of arcing contact materials based on copper infiltrated tungsten composites,* The 9th International Conference BALTTRIB 2017, 16-17.11.2017, Aleksandras Stulginskis University, Akademija, Kaunas, Lithuania.
4) **M.V. Lungu**, et. al., *Enhanced ZnO and Ag-ZnO nanostructured coatings grown on stainless steel for medical applications,* 10th International Conference on Photoexcited Processes and Applications ICPEPA-10, August 29- Sept. 2, 2016, Brasov, Romania.
5) **M. Lungu**, et. al., *Synthesis, processing and characterisation of Ag-ZnO nanostructured materials and coatings for medical applications,* 12th International Conference on Nanosciences & Nanotechnologies (NN15), Thessaloniki, Greece, 7-10.07.2015.
6) **M. Lungu**, et al., *Development of W-Cu-Ni electrical contact materials with enhanced mechanical properties by spark plasma sintering process* APMAS 2013, 3rd International Advances in Applied Physics & Materials Science Congress, 24-28 April 2013, Antalya, Turkey
7) V. Tsakiris, **M. Lungu**, et al., *Nanostructured W-Cu electrical contact materials processed by hot isostatic pressing* APMAS 2013, 3rd International Advances in Applied Physics & Materials Science Congress, 24-28 April 2013, Antalya, Turkey.
8) **M. Lungu**, et al., *Al-Mg alloy with thixotropic microstructure,* Conference: 1st International Workshop "Innovation and Evolution by R&D-SMSs Strategic Partenership", Sept. 2009, Bucharest, Romania.
9) **M. Lungu**, et al., *Modeling and simulation of the warm forward extrusion process for some sintered round bars* Joint International Conf. Materials for Electrical Engineering, 6th Ed. MmdE 2008 & 5th Ed. IEEE ROMSC 2008, June 16-18, 2008, Bucharest, Romania.
10) **M. Lungu**, et al., *A new type of silver powders for conductive inks and pastes,* 4th Int. Workshop on Nanosciences & Nanotechnologies NN07 16-18 July 2007, Thessaloniki, Greece.
11) S. Gavriliu, **M. Lungu**, et al., *Composite powders with bactericidal properties* EuroNanoForum 2007, Nanotechnology in Industrial Applications, June 19-21, 2007, CCD Düsseldorf, Germany.
12) S. Gavriliu, **M. Lungu**, et al., *A new type of powders mixtures for advanced electrical contact materials* EuroNanoForum 2007, Nanotechnology in Industrial Applications, June 19-21, 2007, CCD Düsseldorf, Germany.
13) **M. Lungu**, et al., *Some considerations concerning the obtaining of some Ag-SnO_2 sintered electrical contacts for low voltage power engineering switching devices,* MATEHN'06, 4th International Conference on Materials and Manufacturing Technologies, Sept. 21-23, 2006, Cluj-Napoca, Romania.
14) S. Gavriliu, **M. Lungu**, et al., *A comparative study concerning the obtaining and the using of some Ag-CdO, Ag-ZnO and Ag-SnO_2 sintered electrical contact materials,* MATEHN'06, 4th International Conference on Materials and Manufacturing Technologies, Sept. 21-23, 2006, Cluj-Napoca, Romania.

Representative Projects

1) **Project Director** (2020-2022) of the experimental demonstration (PED) project: PN-III-P2-2.1-PED-2019-5337 entitled "*Development of reliable metal oxide varistors for the enhancement of the protective effect of surge arresters",* Contract 327 PED/2020, funded by UEFISCDI, co-funded by SC MAIRA MONTAJ SRL (http://www.icpe-ca.ro/327ped-2020/)
2) **Project Responsible** (2019-2022) of the NUCLEUS (CORE) project: entitled "*Micro/nano-structured metallic and composite advanced materials with high performance properties for practical applications in priority areas" and* ***Responsible of the Scientific Objective/Thematic no. 1*** entitled "*Ti-based metal alloys (Ti-Al, Ti-Si, Ti-Cr, Ti-Al-Si, Ti-Al-Cr, Ti-Cr-Si) and their use in obtaining hard anti-wear coatings with a ternary complex composition (Ti-Al-N, Ti-Si-N or Ti-Cr-N) or quaternary (Ti-Al-Si-N, Ti-Al-Cr-N or Ti-Cr-Si-N) deposited as nanostructured thin layers on steel substrate, with potential application in the steel molds manufacturing industry, mechanical and electrical engineering"* developed within the NUCLEUS (CORE) programme "*Materials, methods, technologies, devices and equipment specific to electrical engineering for competitivity growing of economical agents and sustainable development of society",* acronym Electro-Eco-Tech, Contract 46N/2019, project PN 19310102/2019, funded by MCI/MEC (http://www.icpe-ca.ro/proiecte-icpeca/program-nucleu/);
3) **Project Responsible** (2019-2021) of a POC type D project (effectively collaborative research between an R&D organization and an industrial end-user), entitled "*Research and development of new advanced composite materials based on tungsten-copper for electrical switching devices"*, Contract POC 133 D6 MAIRA/2019 within the Competitivity Operational Program (POC), co-funded by the European Union through the European Regional Development Fund (ERDF) and SC MAIRA MONTAJ SRL, Romania (https://proiect-phoenix.ro/contracte-subsidiare/tip-d-cercetare-in-comun)
4) **Project Responsible** (March-Sept. 2018) of the NUCLEUS (CORE) project: entitled "*Advanced materials for various applications: electrical engineering, energy, health" and* ***Responsible of the Scientific Objective/Thematic no. 1*** entitled "*Realization of new functional coatings with anti-wear protection based on TiAl/TiAlN deposited on steel substrate"* developed within the NUCLEUS (CORE) programme "*Innovative materials and equipment for electrical engineering",* acronym ElectroEchipaMat, Contract 35N/2018, project PN 1824 0101/2018, funded by MCI (http://www.icpe-ca.ro/proiecte-icpeca/program-nucleu/)
5) **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 UEFISCDI, co-funded by SC MAIRA MONTAJ SRL, (http://www.icpe-ca.ro/icpe-ca/proiecte/proiecte-nationale/pn-2016-2020/hpersint/hpersint.htm)
6) **Project Director** (2014-2017) of the PNCDI II-PARTNERSHIPS PN-II-PT-PCCA-2013-4-1292 project entitled "*Innovative nanostructured materials and coatings with antimicrobial activity for medical applications",* Contract 215/2014, funded by MENCS-UEFISCDI, co-funded by SC MGM STAR CONSTRUCT SRL (http://www.icpe-ca.ro/proiecte/proiecte-nationale/pn-2014/inmatco.pdf)

7) **Key Person** (2012-2016) of the project entitled "*New vacuum low voltage compact contactor",* Contract 34/2012, funded by MENCS-UEFISCDI, co-funded by SC ICPE SA and SC MEDAPTECH SRL (https://sites.google.com/site/projectnewalc/Project-NeWaLC)
8) **Key Person** (2012-2016) of the project entitled "*Direct laser writing of polymer - graphene composites",* Contract 146/2012, funded by MENCS-UEFISCDI (http://ppam.inflpr.ro/proiect.htm)
9) **Project Director** (2015) of the Services contract no. **2059/2015** with SC Troleibuzul SA, Piatra Neamt, Romania for the "*Achievement of AgCdO12 electrical contact pieces".*
10) **Project Director** (2014) of the Services contract no. **180/2014** with INCD TURBOMOTOARE COMOTI Bucharest, Romania for the "*Study on characterization of thin layer deposition bearings*".
11) **Technical Responsible** (2011-present) for the development and achievement of electrical contact pieces based on Ag-CdO, Ag-SnO_2, 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, 2070/2017 and 2079/2019 for various Romanian industrial end-users (SC ELECTROAPARATAJ SA, SC MAIRA MONTAJ SRL, SC SATURN SA Alba Iulia, SC S&M EXIM SRL, SC ICPE SA, SC ELECTROAPARATAJ TRACTIUNE SRL, a.o.);
12) **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*".
13) **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.
14) **Project Responsible** (2011) and Participant (2008-2010) of the PNCDI II-PARTNERSHIPS project entitled "*Breathable superhydrophobic nanostructures*", Contract **32-168/2008.**
15) **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.
16) **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.
17) **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 (2018), Protocol no. 02-1-1107-2011/2019, *Study of ferrite for ferrofluids application*, funded by the ANCSI.
2) Project with IUCN/JINR Dubna (2018), Protocol no. 04-4-1121-2015/2020, *Study of biosynthesized nanomaterials*, funded by the ANCSI.
3) Project with IUCN/JINR Dubna (2018), Protocol no. 04-4-1121-2015/2020, *The role of precipitates and oxides in shape memory materials*, funded by the ANCSI.
4) Project with IUCN/JINR Dubna (2015-2017), Protocol no. 4406-4-2015/2017, *Multifunctional nanocomposites investigations by neutron scattering methods*, funded by the ANCSI.
5) Project with IUCN/JINR Dubna (2015-2017), Protocol no. 4406-4-2015/2017, *Multifunctional nanocomposites*, funded by the ANCSI.
6) Project with IUCN/JINR Dubna (2015-2017), Protocol no. 4446-4-2015/2017, *Microstructural investigation of shape memory alloys by neutron diffraction*, funded by the ANCSI.
7) Project with IUCN/JINR Dubna (2012-2014), Protocol no. 4131-4-2012/2014, Contract 25/2012, *Neutron diffraction study of shape memory alloys*, funded by the ANCSI.
8) Project with IUCN/JINR Dubna (2012-2014), Protocol no. 4141-4-2012/2014, Contract 27/2012, *Multifunctional conductive nanographite oxide and graphene/PMMA nano-composites*, funded by the ANCSI.
9) 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.
10) Project FP6-SSA-INDUMAT (2004-2007), Contract 17240/2004, *Strengthening of the RDT potential for advanced materials and composites to enhance the performance of the electrical industry*, funded by the European Commission
11) Bilateral project (2004-2005), Contract 4131/2003 between INCDIE ICPE-CA Bucharest, Romania and IMT Lujbljana, 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.
12) 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) **Diploma with Gold Medal** at the International Exhibition of Inventics, INVENTICA 2022, Ed. XXVI, 22-24 June 2022, Iasi, Romania, for the Patent Appl. No. A/00276 of 21.05.2020.
2) **Diploma with Gold Medal** at the International Exhibition of Inventics, INVENTICA 2022, Ed. XXVI, 22-24 June 2022, Iasi, Romania, for the Patent Appl. No. A/00902 of 16.11.2018.
3) **Diploma of Excellence** granted by the **National Institute for Laser, Plasma and Radiation Physics (INFLPR), Magurele, Romania**, at the European Exhibition of Creativity and Innovation EUROINVENT, Ed. 14, 26-28 May 2022, Iasi, Romania, for the Patent Appl. No. A/00276 of 21.05.2020.
4) **Diploma with Silver Medal** at the European Exhibition of Creativity and Innovation EUROINVENT,

Ed. 14, 26-28 May 2022, Iasi, Romania, for the Patent Appl. No. A/00276 of 21.05.2020.

5) **Diploma of Excellence** granted by the **National Institute for Research and Development in Environmental Protection (INCDPM), Bucharest, Romania**, at the European Exhibition of Creativity and Innovation EUROINVENT, Ed. 14, 26-28 May 2022, Iasi, Romania, for the Patent Application No. A/00902 of 16.11.2018.
6) **Diploma with Bronze Medal** at the European Exhibition of Creativity and Innovation EUROINVENT, Ed. 14, 26-28 May 2022, Iasi, Romania, for the Patent Appl. No. A/00902 of 16.11.2018.
7) **National Award granted in Dec. 2021 by UEFISCDI, Romania** for the proposal registration code: PN-III-P1-1.1-PRECBVT-2021-3340 for the research results of the patent No.131129 of 26.02.2021.
8) **National Award granted in Dec. 2021 by UEFISCDI, Romania** for the proposal registration code: PN-III-P1-1.1-PRECISI-2021-62886 for the research results of the the article C.A. Manea, M. Sohaciu, R. Stefănoiu, M.I. Petrescu, **M.V. Lungu**, I. Csaki, *New HfNbTaTiZr high-entropy alloy coatings produced by electrospark deposition with high corrosion resistance*, Materials, ISSN: 1996-1944, Aug. 2021, Vol. 14, 4333, IF/2020 = 3.623.
9) **National Award granted in Dec. 2020 by UEFISCDI, Romania** for the proposal registration code: PN-III-P1-1.1-PRECBVT-2020-2761 for the research results of the patent No. 132591 of 30.01.2020.
10) **National Award granted in Dec. 2020 by UEFISCDI, Romania** for the proposal registration code: PN-III-P1-1.1-PRECBVT-2020-2757 for the research results of the patent No. 132592 of 30.04.2020.
11) **National Award granted in Dec. 2020 by UEFISCDI, Romania** for the proposal registration code: PN-III-P1-1.1-PRECBVT-2020-2743 for the research results of the patent No. 129708 of 30.12.2019.
12) **National Award granted in Dec. 2020 by UEFISCDI, Romania** for the proposal registration code: PN-III-P1-1.1-PRECISI-2020-49009 for the research results of the article L. Burlibașa, M.C. Chifiriuc, **M.V. Lungu**, et. al., *Synthesis, physico-chemical characterization, antimicrobial activity and toxicological features of Ag-ZnO nanoparticles*, Arabian Journal of Chemistry, ISSN: 1878-5352, Vol. 13, Issue 2, Febr. 2020, p. 4180-4197, IF/2019 = 4.762.
13) **National Award granted in Nov. 2020 by UEFISCDI, Romania** for the proposal registration code: PN-III-P1-1.1-PRECBVT-2020-2706 for the research results of the patent No. 130834 of 30.06.2020.
14) **Diploma with Gold Medal** at the International Exhibition of Innovations", PRO INVENT Ed. XVIII, 18-20.11.2020, Cluj-Napoca, Romania, granted by the Technical University of Cluj-Napoca for the Patent Appl. No. A/00276 of 21.05.2020.
15) **Diploma with Gold Medal** at the International Exhibition of Innovations", PRO INVENT Ed. XVIII, 18-20.11.2020, Cluj-Napoca, Romania, granted by the Technical University of Cluj-Napoca for the Patent Appl. No. A/00472 of 27.06.2018.
16) **"Reviewer of the Month"** (Nov. 2019) for Articles Published in **Oriental Journal of Chemistry, India,** https://www.linkedin.com/posts/oriental-journal-of-chemistry_sentinelsofscience-reviewer-referee-activity-6595261857144107008-6Lkc
17) **National Award granted in Aug. 2019 by UEFISCDI, Romania** for the proposal registration code: PN-III-P1-1.1-PRECBVT-2018-1630 for the research results of the patent No. 129351 of 30.10.2018.
18) **Diploma of Excellence with PRO INVENT Medal** at the International Exhibition of Innovations, PRO INVENT Ed. XVII, 20-22.03.2019, Cluj-Napoca, Romania, granted by the Technical University of Cluj-Napoca for the Patent Appl. No. A/00780 of 01.11.2016.
19) **Diploma of Excellence with PRO INVENT Medal** at the International Exhibition of Innovations, PRO INVENT Ed. XVII, 20-22.03.2019, Cluj-Napoca, Romania, granted by the Technical University of Cluj-Napoca for the Patent Appl. No. A/00886 of 22.11.2016.
20) **National Award granted in Dec. 2018 by UEFISCDI, Romania** for the proposal registration code: PN-III-P1-1.1-PRECISI-2018-29223 for the research results of the article **M.V. Lungu,** et. al., *Functional properties improvement of Ag-ZnO thin films using Inconel 600 interlayer produced by electron beam evaporation technique*, Thin Solid Films, Elsevier, ISSN: 0040-6090, Vol. 667, 1 Dec. 2018, p. 76-87, DOI: 10.1016/j.tsf.2018.09.055, IF/2017 = 1.939.
21) **National Award granted in Dec. 2018 by UEFISCDI, Romania** for the proposal registration code: PN-III-P1-1.1-PRECISI-2018-27625 for the research results of the article I. Csaki, K.R. Ragnasdottir, A. Buzaianu, K. Leosson, V. Motoiu, S. Guðlaugsson, **M.V. Lungu**, H.O. Haraldsdottir, S.N. Karlsdottir, *Nickel based coatings used for erosion-corrosion protection in a geothermal environment*, Surface & Coatings Technology, Elsevier, ISSN: 0257-8972, Vol. 350, p. 531-541, DOI: 10.1016/j.surfcoat.2018.07.029, Sept. 2018, IF/2017 = 2.906.
22) **National Award granted in Sept. 2018 by UEFISCDI, Romania** for the proposal registration code: PN-III-P1-1.1-PRECBVT-2018-1369 for the research results of the patent No. 131727 of 30.07.2018.
23) **Diploma of Excellence** at the European Exhibition of Creativity and Innovation EUROINVENT, Ed. 10, 17-19 May 2018, Iasi, Romania for the Patent Application No. A/00886 of 22.11.2016.
24) **Diploma with Gold Medal** at the European Exhibition of Creativity and Innovation EUROINVENT, Ed. 10, 17-19 May 2018, Iasi, Romania for the Patent No. 127170 B1 of 30.06.2016.
25) **Diploma with Silver Medal** at "The 46th International Exhibition of Inventions of Geneva - 2018, Geneva, Switzerland, 11-15.04.2018 for the Patent Application no. No. A/00581 of 30.07.2014.
26) **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.
27) **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.
28) **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.
29) **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. 127170 of 30.06.2016.
30) **National Award granted in Dec. 2017 by UEFISCDI, Romania** for the proposal registration code:

PN-III-P1-1.1-PRECBVT2017-0795 for the research results of the patent No. 129565 of 30.10.2017

31) **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.
32) **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.
33) **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
34) **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 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.
35) **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)
36) **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.
37) **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.
38) **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 AlSi9Cu3/5% Gr_{Cu} composite*, Composites Part B: Engineering, Vol. 81, Nov. 2015, p. 141-148, DOI: 10.1016/j.compositesb.2015.07.006, IF/2014 = 2.983.
39) **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.
40) **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.
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42) **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.
43) **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.
44) **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.
45) **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.
46) **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.
47) **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.
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50) **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.
51) **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.
52) **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.
53) **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.

54) **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.
55) **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.
56) **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 University of Cluj-Napoca for the Patent Appl. No. A/00098 of 6.02.2008.
57) **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.
58) **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.
59) **Diploma of Appreciation** for the work "*Electronic cooling using the porous metallic materials*", Authors: M. Lucaci, R.L. Orban, **M. Lungu**, E. Enescu, S. Gavriliu, presented at 2006 PM World Congress, Bexco, Busan, Korea.
60) **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 - H_2FC, 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/), from Jan. 2017 - present.

Member in Technical Program Committee (TPC):

1) TPC member of The first International Conference on Electrical Engineering ICPE-CA, ASMES'2019 - Advanced Structures, Materials and Electrical Systems, 20-22 Nov. 2019, Predeal, Romania, http://www.icpe-ca.ro/eng/events/asmes2019/programme-committee.htm
2) Int. TPC member of ICEMEE 2019, The 5th Int. Conf. on Energy Materials and Environment Engineering, April 12-14, 2019, Kuala Lumpur, Malaysia, (http://www.icemee.org/committee);
3) Int. Scientific Committee of ICE2ME2019, Int. Conf. on Electronical, Mechanical and Materials Engineering (ICE2ME2019), Jan. 20-21, 2019, Wuhan, China, http://www.ice2me.org/com.html
4) Int. Committee Member of EUROCHEMISTRY 2018, 2nd Int. Conf. on Advances & Innovative Trends in Chemistry, Dec. 5-6 2018, Madrid, Spain (https://chemistry.pulsusconference.com/organizing-committee)
5) Committee Member of ICEMEE 2018, The 4th Int. Conf. on Energy Materials and Environment Engineering (ICEMEE 2018), April 13-15, 2018, Shah Alam, Malaysia, (http://icemee.net/a/com/)
6) 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)
7) 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 peer-reviewed journals:

1) **Member in Editorial Board** of **Nano Science & Nano Technology: An Indian Journal**, ISSN Print: 0974-7494, from 2021 - present, https://www.tsijournals.com/journals/nano-science-nano-technology-an-indian-journal-editors.html
2) **Member in Editorial Board** of **Material Science Research India (MSRI)**, ISSN Print: 0973-3469, Online: 2394-0565, from 2019 - present, http://www.materialsciencejournal.org/editorial-board/
3) **Member** in **Editorial Board** of **I3 Scientific Articles**, Finland (https://sciarticles.i3press.fi/index.php/sa/about/editorialTeam), from March 2019 - present
4) **Honorable Member** of **International Advisory Board** of **Oriental Journal of Chemistry (OJC),** ISSN: 0970-020X, India, 2018 - Febr. 2022, http://www.orientjchem.org/editorial-board/
5) **Member** in **Editorial Board** of **Open Science Journal**, ISSN 2466-4308 (Online), Serbia, from 2018 - present, https://osjournal.org/editorial_board.html
6) **Member** in **Editorial Board** of **Electrotehnica, Electronica, Automatica (Electrical Engineering, Electronics, Automation) (EEA)**, edited by ELECTRA Publishing House, Romania, ISSN: 1582-5175, from 2017 - present, http://www.eea-journal.ro/ro/p/ed_board
7) **Member** in **Editorial Board** of **Advances in Materials (AM)**; ISSN: 2327-2503, edited by Science Publishing Group, in the time period: Jan. 2016 – Jan. 2018, April 2021 – April 2022. http://www.sciencepublishinggroup.com/journal/editorialboard?journalid=129
8) **Member** in **Editorial Board** of **Pyrex Journal of Engineering and Manufacturing Technology (PJEMT)**, Nigeria, from 2016 - present, http://pyrexjournals.org/pjemt/editorial-board.php
9) **Member** in **Editorial Board** of **MAYFEB Journal of Materials Science**, ISSN 2371-8722, edited by MAYFEB Technology Development, Canada, from 2016 - present, http://www.mayfeb.com/OJS/index.php/MAT/about/editorialTeam

Citations

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476 citations & h-index: 9 in Research Gate, Research Interest Score: 545.9 (higher than 88% of researchers on ResearchGate) https://www.researchgate.net/profile/Magdalena_Valentina_Lungu
356 citations & h-index: 9 in Web of Science (Publons) http://www.researcherid.com/rid/G-3932-2017
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https://www.scopus.com/authid/detail.url?authorId=24080874500
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Courses

1) **Course "European Interoperability Framework (EIF) Online Training"**, Certificate of completion issued on June 4, 2022 by the European Commission, Credential ID: UAmajR4XEb, https://academy.europa.eu/local/euacademy/pages/my/achievements.php?dtype=certificate&did=6
2) **Course "PM C1 - PM² Essentials, Project Management Methodology"**, Certificate of completion issued on June 3, 2022 by the European Commission, Credential ID: N7CpGWsAGe, https://academy.europa.eu/local/euacademy/pages/my/achievements.php?dtype=certificate&did=26
3) **Course „AEASM1x: Introduction to Aerospace Structures and Materials"**, organized by DelftX, an online learning initiative of the Delft University of Technology, The Netherlands, in the time period: 14 July 2019 - 22 August 2019, EdX Verified Certificate of Achievement, Valid Certificate ID: 84ebf86a25b74db0bab4b6ccd75cd4bc, issued on August 14, 2019, https://courses.edx.org/certificates/84ebf86a25b74db0bab4b6ccd75cd4bc, score: 99 % of 100 %.
4) **Course "Specialist in ISO 12078:2018 standard"** supported by the Contract 30 PFE/2018, in the time period: 19-21.06.2019, lector Trif Cornelia from TÜV AUSTRIA ROMANIA S.R.L.
5) **Course "Management of Research Projects"** organized in the CEEX-M II Program/Contract 6062 by MCT - National School of Political and Administrative Studies, in the time period: 01 Oct. 2006 - 30 Nov. 2006; Certificate No. A 0041 issued on 12.12.2007.
6) **Summer School "Nanosciences & Nanotechnologies" NN07**, in the time period: 14-20 July, 2007, Aristotle University, Faculty of Physics, Thessaloniki, Greece.
7) **Course "Assistant Manager"** organized by AMCSIT-Polytechnic, in the time period 26.10.2005 - 09.11.2005, Diploma No. 5/14.11.2005 attested by the Ministry of Labor, Social Solidarity and Family and by the Ministry of Education and Research, Romania.
8) **Course „New Experimental Approaches in Magnetism" - European School of Magnetism**, Constanta, Romania, 7-16 Sept., 2005.

Expert Evaluator / Rapporteur

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

1) **Expert Evaluator** for the remote evaluation of some project proposals within the **HORIZON-EIC-2022-PATHFINDEROPEN-01 call**, **Topic: HORIZON-EIC-2022-PATHFINDEROPEN-01-01**, coordinated by the Research Executive Agency (REA) delegated by the European Commission from Brussels, Belgium, in June-July 2022.
2) **Expert Evaluator & Rapporteur** for the remote evaluation of some project proposals within the **HORIZON-CL4-2022-RESILIENCE-01 Call, Topic: HORIZON-CL4-2022-RESILIENCE-01-12**, coordinated by the Research Executive Agency (REA) delegated by the European Commission from Brussels, Belgium, in May-June 2022.
3) **Expert Evaluator & Rapporteur** for the remote evaluation of some project proposals within the **M-Era.Net 2021 call**, coordinated by the FFG - Austrian Research Promotion Agency, Wien, Austria, in Dec. 2021.
4) **Expert Evaluator & Rapporteur** for the remote evaluation of some project proposals within the **Research Fund for Coal and Steel, Call RFCS 2021**, **Topic: RFCS-02-2021-RPJ**, coordinated by the Research Executive Agency (REA) delegated by the European Commission from Brussels, Belgium, in Oct.-Nov. 2021;
5) **Expert Evaluator** for the remote evaluation of some project proposals within the **HORIZON-EIC-2021-PATHFINDEROPEN-01 call**, **Topic: HORIZON-EIC-2021-PATHFINDEROPEN-01-01**, coordinated by the Research Executive Agency (REA) delegated by the European Commission from Brussels, Belgium, in June-July 2021;
6) **Expert Evaluator & Rapporteur** for the remote evaluation of some project proposals within the **M-Era.Net 2020 call**, coordinated by the FFG - Austrian Research Promotion Agency, Wien, Austria, in Dec. 2020.
7) **Expert Evaluator** for the remote evaluation of some outputs within the research and professional activity of research-oriented institutes of the Czech Academy of Sciences for the time period 2015 - 2019 (Phase I), in June 2020.
8) **Expert Evaluator & Rapporteur** for the remote evaluation of some project proposals within the **H2020-NMBP-TR-IND-2020-twostage_Stage1 call**, **NMBP-21-2020 topic,** coordinated by the Research Executive Agency (REA) delegated by the European Commission from Brussels, Belgium, in Jan. - Febr. 2020.
9) **Expert Evaluator & Rapporteur** for the remote evaluation of some project proposals within the **M-Era.Net 2019 call**, coordinated by the FFG - Austrian Research Promotion Agency, Wien, Austria, in Dec. 2019.
10) **Expert Evaluator** for the remote evaluation of some project proposals within the **State Program RMD-PS-2019** call, coordinated by the National Agency for Research and Development (ANCD), from the Republic of Moldova, and UEFISCDI, Romania, in Nov. 2019.
11) **Expert Evaluator** for the remote evaluation of a project proposal within the FONDECYT Regular 2019 grant competition, an initiative of the Chilean National Science and Technology Commission (CONICYT - Chile), in Oct. 2018;
12) **Expert Evaluator** for the remote evaluation of a Grant application for BSAC (British Society for Antimicrobial Chemotherapy), UK, in Jan. 2017;
13) **Expert Evaluator & Rapporteur** for the remote 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), Romania, in August 2016.

14) **Expert Evaluator** for the remote 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.
15) **Expert Evaluator** for the remote 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, Romania, in May 2016.
16) **Expert Evaluator & Rapporteur** for the remote evaluation of some project proposals within the **Human Resources Programme, "Young research teams" (RU-TE) Subprogram, PN-II-RU-TE2014-4 Call,** coordinated by the UEFISCDI, Romania, in April-July 2015.

Reviewer:

https://www.webofscience.com/wos/author/record/608852
https://www.webofscience.com/wos/author/rid/G-3932-2017
Web of Science ResearcherID: G-3932-2017
Academy graduate & mentor (**361 verified reviews** on journals in partnership with Web of Science, and 2 open post-publication reviews)
IOP Trusted Reviewer Certificate, Issued Aug. 2022, Credential ID 57323316,
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1) Journal of Applied Polymer Science, Ed. Wiley, ISSN: 1097-4628 (IF/2014 = 1.64), from 2011
2) Analytical Methods-UK, Ed. Royal Society of Chemistry, ISSN: 1759-9660 (IF/2014 =1.821), from 2012
3) RSC Advances, Ed. Royal Society of Chemistry, ISSN: 2046-2069 (IF/2014 = 3.84), from 2013
4) Journal of Nanoparticle Research, Ed. Springer, ISSN: 1388-0764 (IF/2014 = 2.184), from 2013
5) Applied Surface Science, Ed. Elsevier, ISSN: 0169-4332 (IF/2014 = 2.711), from 2013
6) Physical Sciences Research International, Ed. Science Domain Int., ISSN: 2348-0130, from 2013
7) Proceedings of The 3rd International Conference on Biomedical Engineering and Biotechnology (ICBEB) Beijing, China, in 2014
8) Journal of Inorganic and Organometallic Polymers and Materials, Ed. Springer, ISSN: 1574-1443 (IF/2014=1.16), from 2014
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10) Metallurgical and Materials Transactions A, Ed. Springer, ISSN: 1073-5623 (IF/2014 = 1.73), from 2014
11) CrystEngComm, Ed. Royal Society of Chemistry, ISSN: 1466-8033 (IF/2014 = 4.034), from 2014
12) Journal of Physics D: Applied Physics, Ed. 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, Ed. Trans Tech Publications Inc., ISSN print: 1022-6680, ISSN web 1662-8985, from 2015
15) New Journal of Chemistry, Ed. Royal Society of Chemistry, ISSN: 1144-0546 (IF/2014 = 3.086), from 2015
16) Nanotechnology, Ed. IOP Publishing, print ISSN: 0957-4484 (IF/2014 = 3.821), from 2015
17) Chemical Industry & Chemical Engineering Quaterly (Chem. Ind. Chem. Eng. Q.), Belgrade, Serbia, ISSN: 1451-9372 (IF/2014 = 0.659), from 2015
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19) International Journal of Nanomedicine, Ed. Dove Medical Press, ISSN:1176-9114 (IF/2014=4.383), from 2015
20) Journal of Alloys and Compounds, Ed. Elsevier, ISSN: 0925-8388 (IF/2014 = 2.999), from 2015
21) Acta Biomaterialia Odontologica Scandinavica, Ed. Taylor&Francis, ISSN: 2333-7931, from 2015.
22) Science and Engineering of Composite Materials (SECM), Ed. De Gruyter, ISSN: 2191-0359 (IF/2015 = 0.515), from 2016
23) Tribology International, Ed. Elsevier, ISSN: 0301-679X (IF/2016 = 2.259), from 2017.
24) Indian Journal of Engineering&Materials Sciences (IJEMS), Ed. National Institute of Science Communication and Information Resources (NISCAIR), ISSN: 0975-1017 (Online); 0971-4588 (Print);
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), Ed. Science Publishing Group ISSN: 2327-2503, from 2017.
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29) Applied Organometallic Chemistry (AOC), Ed. John Wiley & Sons Ltd, Online ISSN: 1099-0739 (IF/2016 = 2.319), from 2017.
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32) Pyrex Journal of Engineering and Manufacturing Technology, Pyrex Journals
33) International Journal of Food Properties, Ed. Taylor & Francis Group, ISSN: 1094-2912 (IF/2017 = 1.845), from 2018.
34) Proceedings of The 7th Int. Conf. on Biomedical Engineering and Biotechnology (ICBEB 2018), Oct.

17-20, 2018) Beijing, China (http://paper.academicconf.com/reviewers.aspx?confname=icbeb2018)

35) Chemical Data Collections, Ed. Elsevier, ISSN: 2405-8300 (CiteScore/2017 = 0.87), from 2018
36) Proceedings of The 2nd International Conference on Material Strength and Applied Mechanics (MSAM 2019), Kiev, Ukraine, May 27-30, 2019.
37) Journal of Materials Science&Technology, Ed. Elsevier, ISSN: 1005-0302 (IF/2018 = 5.04), from 2019.
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48) Current Research in Nutrition and Food Science, Ed. Enviro Research Publishers, ISSN: 2347-467X, from 2020.
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52) Engineering Research Express (ERX), Ed. IOP Publishing, ISSN: 2631-8695, from 2020.
53) International Journal of Medical Research & Health Sciences (IJMRHS), ISSN: 2319-5886, from 2021.
54) International Journal of Nanotechnology (*IJNT)*, Ed. Inderscience Publishers, ISSN online: 1741-8151, ISSN print: 1475-7435 (IF/2020 = 0.367), from 2021.
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57) Polymers, Ed. MDPI, ISSN: 2073-4360 (IF/2020 = 4.329), from 2021.
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63) Journal of Biomaterials Applications, Ed. SAGE Publishing, ISSN: 0885-3282 (IF/2021 = 2.646), from Dec. 2021.
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65) Surface Review and Letters, Ed. World Scientific Publishing, ISSN (print): 0218-625X, ISSN (online): 1793-6667 (IF/2021 = 1.152), from Jan. 2022.
66) Microelectronics International, Ed. Emeral Group Publishing, ISSN: 1356-5362 (IF/2021 = 0.758), from Jan 2022.
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71) Materials and Manufacturing Processes, Ed. Taylor & Francis, ISSN: 1042-6914 (IF/2020 = 4.616), from June 2022.
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