



## Curriculum vitae Europass

### Personal Information

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Birth date 09 September 1982



### Professional Experience

Period	<b>2022-present</b>
Position	<b>Scientific researcher I</b>
Institution	Molecular and Biomolecular Physics Department, National institute for Research and Development of Isotopic and Molecular Technologies. Cluj-Napoca, Romania
Period	<b>2016-present</b> (March 2018 - January 2020: maternity leave)
Position	<b>Scientific researcher I</b>
Institution	Center for Nanobiophotonics and Laser Microspectroscopy, Interdisciplinary Research Institute in Bio-Nano-Sciences, Babes-Bolyai University, Cluj-Napoca, Romania
Period	<b>2017-2018</b>
Position	<b>Postdoctoral researcher</b>
Institution	Research Center for Functional Genomics, Biomedicine and Translational Medicine, "Iuliu Hatieganu", University of Medicine and Pharmacy, Cluj-Napoca, Romania
Period	<b>2015-2016</b>
Position	<b>Scientific researcher III</b>
Institution	Center for Nanobiophotonics and Laser Microspectroscopy, Interdisciplinary Research Institute in Bio-Nano-Sciences, Babes-Bolyai University, Cluj-Napoca, Romania
Period	<b>2012-2015</b>
Position	<b>Postdoctoral researcher</b>
Institution	Oncological Institute „Prof. Ion Chiricuta”, Cluj-Napoca, Romania
Period	<b>2007-2012</b>
Position	<b>Research assistant</b>
Institution	Center for Nanobiophotonics and Laser Microspectroscopy, Interdisciplinary Research Institute in Bio-Nano-Sciences, Babes-Bolyai University, Cluj-Napoca, Romania

## Studies

Period	<b>2007 - 2011</b>
Degree	<b>PhD in Physics</b>
Domain	Physics
Institutions	Doctoral School of Physics, Babes-Bolyai University, Cluj-Napoca, Romania Laboratoire Interdisciplinaire de Physique, Universite Joseph Fourier, Grenoble, France
Period	<b>2006 - 2008</b>
Degree	<b>MSc in Biophysics and Medical Physics</b>
Domain	Biophysics and Medical Physics
Institutions	Faculty of Physics, Babes-Bolyai University, Cluj-Napoca, Romania Laboratoire Interdisciplinaire de Physique, Universite Joseph Fourier, Grenoble, France
Period	<b>2002 - 2006</b>
Degree	<b>BSc in Physics</b>
Domain	Medical Physics
Institution	Faculty of Physics, Babes-Bolyai University, Cluj-Napoca, Romania

## Research Stages

Period	<b>March 2016</b>
Activity	Research stage mobility in Project EEA Grants Programme - Norway, Iceland and Liechtenstein,
Institution	project no. RO15-0076, University of Bergen, Bergen, Norway
Period	<b>October 2015</b>
Activity	Research stage mobility in Bilateral Cooperation Project Brâncuși Romania-France 0052/2014
Institution	Centre de Recherche Paul Pascal CNRS, Bordeaux, France
Period	<b>September 2012</b>
Activity	Research stage mobility in Bilateral Cooperation Project Brâncuși Romania-France, no. 489/2011
Institution	Université Paris 13, Sorbonne Paris Cité, Chimie Structures et Propriétés de Biomatériaux et d'Agents Thérapeutiques, UMR 7244, Bobigny, France
Period	<b>March-May 2012</b>
Activity	Postdoctoral scholarship C-MIRA2011(Coopération et Mobilités Internationales Rhône-Alpes)
Institution	Laboratoire Interdisciplinaire de Physique, Universite Joseph Fourier, Grenoble, France
Period	<b>March-August 2010</b>
Activity	Doctoral scholarship C-MIRA2010 (Coopération et Mobilités Internationales Rhône-Alpes)
Institution	Laboratoire Interdisciplinaire de Physique, Universite Joseph Fourier, Grenoble, France
Period	<b>February-June 2007</b>
Activity	Socrates Erasmus Master scholarship
Institution	Laboratoire de Spectrometrie Physique, Universite Joseph Fourier, Grenoble, France

## Training/ Courses

- 07.04.2017-20.04.2017 Project Manager Diploma - Management of the research projects (Avangarde Bussines Group, CNFPA / ANC, Cluj-Napoca, Romania)
- 28.09.2016 - Seminar on "Holistic nanoparticle characterization method: visualization, size and concentration" (Ronexprim- Malvern Instruments, Cluj-Napoca, Romania)

## Conference Grants

- Nanoscience & nanotechnology, organic electronics and Nanomedicine (NANOTECHNOLOGY 2013) Summer school -Thessaloniki, Greece, Nanomedicine section
- Summer school on Nanomedicine, European Science Foundation, 19-24 June 2011, Lutherstadt Wittenberg, Germany (European Science Foundation- ESF Grant)
- ESOF2010 - Euroscience Open Forum, 2-7 July 2010, Torino, Italy (UNESCO Grant)
- Perspectives in nanoscience and nanotechnology, 28- 30 September 2009, Donostia, Spain (CIC nanoGUNE Grant)

## Managerial Skills

**Director / Team leader of 4 national and 2 international research projects,  
2 national and 2 international scholarships awarded on competition**

- **2018-2022** - COST (European Cooperation in Science and Technology) Action CA17140, *Cancer Nanomedicine - from the bench to the bedside* - Romanian Team Leader and Project Management Comitee Member - international competition
- **2020-2021** - UEFISCDI national project PN-III-P1-1.1-TE-2016-0919, *Nanoparticulate Systems for the Identification of Oncogenes and Delivery of Tumor Inhibitors: New Strategies for Individualized Treatment of B-lineage Leukemias*  
Web: <https://sites.google.com/view/nanonoodles/pagina-de-pornire>
- **2016-2017** - SEE-EEA Romania-Norway inter-institutional cooperation project, 15-SEE-PC-RO-CLUJNAP03, *Innovative Nanoparticles-based Chemotherapy for Acute Myeloid Leukemia* - Babes Bolyai University Team Leader
- **2015-2017** - UEFISCDI national project PN-II-RU-TE-2014-4-2426, *Implementation of multifunctional nanomaterials for the early detection and treatment of Acute Lymphoblastic Leukemia using non-invasive techniques*  
Web: <https://sites.google.com/site/nanomedleukemist/project-overview>
- **2013-2015** - UEFISCDI Postdoctoral research project PN-II-RU-PD-2012-3-0111, *Detection and Treatment of Metastatic Chemoresistant Circulating Tumor Cells Using Bioconjugated Noble-Metal Nanoparticles*  
Web: <https://sites.google.com/site/nanodetctc/>
- **2013-2014** - Babes-Bolyai University Grant for young researchers
- **2011** - Postdoctoral scholarship C-MIRA2011(Coopération et Mobilités Internationales Rhône-Alpes) - international competition (France)
- **2010** - Doctoral scholarship C-MIRA2010 (Coopération et Mobilités Internationales Rhône-Alpes) - international competition (France)
- **2008-2010** - Research scholarship for young doctoral students CNCSIS-BD-385-2008
- **2007** - Socrates Erasmus Master scholarship

### Member in national / international projects

- 14 national research grants (in 9 as a principal investigator / key person)
- 7 international research grants: CA18103 (INNOGLY) (2019-2023), (COST Action CA17140 (Nano2Clinic) (2018-2022), COST Action BM1401 (Raman4clinics) (2014-2017); Romania-Norway (SEE 2015-2016); Romania-France (Brancusi 2014-2016); Romania-Norway (SEE 2014-2016); Romania-Greece (2012-2014); Romania-France (Brancusi 2011-2012)

### Didactic activities

- **2015-present:** - Member of the Doctoral Student Guidance Commission, Institute for Doctoral Studies, Doctoral School of Physics, Babes-Bolyai University, Cluj-Napoca, Romania
- **2009-2019:** - Co-advisor/ laboratory work mentoring of master/ PhD students
- **2016:** - Nanomedicine course - Scientific Students Group of Hematology and Immunopathology, "Iuliu Hatieganu" University of Medicine and Pharmacy, Cluj-Napoca, Romania
- **2009:** - Optics laboratory, Faculty of Physics, Babes-Bolyai University, Cluj-Napoca, Romania

### Administrative / financial activities

- Key person and administrative-financial management in the European project SEE-EEA Norway-Romania, *Nanotechnology approach in Acute Myeloid Leukemia management* (2014-2016)
- Member of the Organizing Committee of the 31<sup>st</sup> European Congress on Molecular Spectroscopy, Cluj-Napoca, Romania (2012)

### Technical Skills

- Laboratory techniques: chemical synthesis of noble-metal nanoparticles; functionalization of nanoparticles with (bio)molecules and polymers; fabrication of metallic nanostructured films by colloidal self-assembly; optical spectrophotometry; Raman/SERS spectroscopy; zeta-potential and dynamic light scattering; bright/dark-field optical microscopy; biomedical applications of noble metal nanoparticles (cancer therapy by plasmonic induced laser hyperthermia, delivery of anti-leukemic drugs, cancer cell targeting and bioimaging); cell culture protocols
- Computer skills: Microsoft Office, Origin, GraphPad Prism, Adobe Photoshop, GIMP

### Foreign Languages

- English (C1), French (B2), Spanish (A2), Hungarian (A2)

### Scientific Output/ Visibility

- ▶ **Editor** of a Topical Issue in *Frontiers in Molecular Biosciences* journal
- ▶ **Reviewer board** of *Nanomaterials* - MDPI journal
- ▶ **Co-author of 39 scientific articles** from which **19 as first / corresponding author, total IF > 120**.
- ▶ The published articles gathered a total number of **>1400 (Scholar) > 1100 (WoS) citations**.
- ▶ **H-index: 19 (Scholar)/ 17 (WoS)**; Researcher ID: C-5765-2012
- ▶ First / Co-author of **4 book chapters**
- ▶ First / Co-author of **2 articles featured on the front cover of *Nanotechnology Journal* (IF > 3.5)**
- ▶ First author of **one article highlighted on the Global Medical Discovery website:**  
<http://globalmedicaldiscovery.com> (Cancer Letters 311 (2011) 131-140; > 200 (WoS) citations)
- ▶ **> 60 participations as first/ co-author at scientific conferences; oral presentations** (SPEC2022, 2022, Dublin, Ireland; BioNanoMed 2015, Graz, Austria; Action BM1401 Meeting 2015, Florence, Italy; BioNanoSpec 2012, Cluj-Napoca, Romania; Workshop PCCE 129- 2011, Cluj-Napoca, Romania; Nanosmat 2010, Reims, France; "New Approaches in Microencapsulation" Workshop 2008, Cluj-Napoca, Romania)
- ▶ Member of British Society of Nanomedicine (BSNM)
- ▶ Member of European Society of Biomaterials (ESB)

### Awards

- ▶ **2020** - L'Oréal-UNESCO For Women in Science Romania
- ▶ **2017** - Special Mention award and Excellence Diploma in the national contest "The Rada Mihalcea Awards for Young Researchers in Science and Engineering", 3<sup>rd</sup> edition, Romania
- ▶ **2013** - Special poster award - Nanotoxicology, BioNanoNet Forschungsgesellschaft, Austria
- ▶ **2011** - Poster award, 2<sup>nd</sup> place - Nanomedicine, Wittenberg, Germany