

# CURRICULUM VITAE

## **Ana-Maria Crăciun (born Găbudean)**

**Nationality:** Romanian

**Marital status:** married, 1 child

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### **1. CAREER PATH**

**Jul 2023 - present:** *Scientific Researcher grade I (CS I, 1/2)*, Nanobiophotonics and Laser Microspectroscopy Center, Interdisciplinary Research in Bio-Nano-Sciences, Babes-Bolyai University

**March 2014 – Jun 2023:** *Scientific Researcher grade III (CS III)* at Nanobiophotonics and Laser Microspectroscopy Center, Interdisciplinary Research in Bio-Nano-Sciences, Babes-Bolyai University (**Oct 2017 – Oct 2019: Maternity leave**)

**June 2010 – Feb 2014 –** *Research Assistant* at Nanobiophotonics and Laser Microspectroscopy Center, Interdisciplinary Research in Bio-Nano-Sciences, and Faculty of Physics, Babes-Bolyai University

**19 Dec 2012 –** *PhD degree in Physics*

### **2. EDUCATION**

- **Sept 2014 – Aug 2015:** *Postdoctoral studies - project* POSDRU/159/1.5/S/132400 - “Tineri cercetători de succes – dezvoltare profesională în context interdisciplinar și internațional”, Project title: *Metallo-polimeric nanoparticles marked with molecules with non-linear optical*

*properties for high resolution imaging applications*, Babes-Bolyai University, Cluj-Napoca

- **Oct 2009 - Sept 2012: PhD in Physics** (*Multifunctional Plasmonic Nanoparticles For Optical Imaging And Detection Methods*) - **Summa cum laude**, Babes-Bolyai University, Cluj-Napoca, Romania – Abstract at: <http://doctorat.ubbcluj.ro/ro/sustinerile-publice-ale-tezelor-de-doctorat/>. Degree obtained in 19 Dec 2012.
- **Oct 2008 - Feb 2010: M. Sc. in Biophysics and Medical Physics** (*New nanoparticles for biophotonic applications: fluorescent gold nanoshells for bioimaging and photoactive pluronic nanobeads for phototherapy*), Babes-Bolyai University, Faculty of Physics, Romania and Joseph Fourier University, Interdisciplinary Physics Laboratory, Grenoble, France (5 months Erasmus research internship)
- **2004 - 2008: B. Sc. in Medical Physics - Valevictorian**, Babes-Bolyai University, Romania

### **3. INTERNSHIPS AND SPECIALIZATIONS**

- **18 - 21 Feb 2013:** „5th European short course on Time-Resolved Microscopy and Correlation Spectroscopy” and „SymPhoTime Training Day” at PicoQuant, Berlin, Germania
- **28 - 29 Nov 2012:** Training on the utilization of Titanium:Sapphire MIRA 900 laser from Coherent, Cluj-Napoca, Romania
- **14 - 15 Nov 2012:** Training on the utilization of MicroTime200 time-resolved confocal fluorescence microscope system from PicoQuant Germany, Cluj-Napoca, Romania
- **Jan - Mar 2012:** Research Internship at Chemistry Laboratory - Functional Materials and Photonics, ENS Lyon, Claude Bernard University, Lyon, France. Subject: *Investigation of hybrid gold nanoparticles through fluorescence microscopy and spectroscopy*
- **Mar - Jul 2009:** Erasmus Research Internship at Interdisciplinary Physics Laboratory, Joseph Fourier University, Grenoble, France. Subject: *New nanoparticles for biophotonic applications: fluorescent gold nanoshells for bioimaging and photoactive pluronic nanobeads for phototherapy*

### **4. VISIBILITY OF THE RESEARCH ACTIVITY**

- **70 scientific articles** from which **67 in ISI journals** (20 as first/corresponding author) **53 in Q1/Q2 journals** (*e.g.* Talanta, Microchimica Acta, Analyst, Frontiers in Chemistry, Colloid Surf. B, Nano Letters, Biosensors and Bioelectronics, Scientific Reports, ACS Appl. Mater. Interfaces, etc.) (based on the IF from publication year, see list of publications); **Hirsch index: 24** (Web of science) / **25** (Scopus) / **27** (Google Scholar); **Citations: 1728** (without self-citations) (WoS)/**1959**

(Scopus)/2347 (Google Scholar); *i10-index (Google Scholar): 46*; co-author of **one book chapter** (Elsevier), **2 national patent applications** (RO135233 (B1) 2023 and A00598 2024), Publication featured on the **back cover** of the article's issue (Analyst, 2021, 146, 7126-7130); over 30 communications at national/international conferences/workshops as posters and oral presentations; **Researcher ID**: C- 6735-2012; **ORCID iD**: 0000-0002-6561-0972

## 5. EXPERIENCE IN PROJECTS/GRANTS/SCHOLARSHIPS

- **Starting Research Grant** SRG 32994/23.06.2023 from Babes-Bolyai University, Project Title: *“Plasmon modulated photoluminescence of gold nanoclusters: towards an improved design of luminescent nanomaterials”*, Budget: 31.845 lei (~ 6.500 euro), Jul 2023-Jun 2024
- **Project Leader** of “Young Research Teams” national grant PN-III-P1-1.1-TE-2019-0700– *“Direct, sensitive and selective fluorescence “turn-off” detection of metallic contaminants from water using photoluminescent gold nanoclusters”*, Budget: 431.900 lei (~90.000 euro), 15 Sept 2020 – 30 Sept 2022, <https://sites.google.com/view/fluonanomet/home>
- **Postdoctoral project** – UEFISCDI national grant PN-III-P1-1.1-PD-2016-0088 - *“Two-photon excited time-resolved photoluminescence imaging and spectroscopy studies on single polymer-stabilized gold nanoparticles towards their applicability as optical contrast agents”*, Budget: 250.000 lei (~52.100 euro), Nov 2019 - Noi 2021, <https://sites.google.com/site/2luminr/home>
- **Project Leader** of “Young Research Teams” national grant PN-II-RU-TE-2014-4-1991 – *“Label-free, rapid and ultrasensitive immunoassay based on Fluorescence Correlation Spectroscopy (FCS) using photoluminescence of gold nanoprobe”*, Budget: 549.700 lei (~122.155 euro), Oct 2015 – Sept 2017, <https://sites.google.com/site/fcordetecten/>
- **Postdoctoral scholarship** in the frame of project POSDRU/159/1.5/S/132400 - *“Young successful researchers – professional development in an international and interdisciplinary environment”*, Project title: *Synthesis of metallo–polymeric nanoparticles labeled with molecules with non – linear optical properties for high – resolution imaging*, Sept 2014 – Aug 2015
- **Grant for young scientists** GTC\_34045/01.11.2013 from Babes-Bolyai University, Project title: *Implementation of new analysis and spectroscopic imaging methods through exploiting the performances of MicroTime200 confocal microscopy system, coupled with femto-second Titanium:Sapphire laser*, Budget: 20.000 lei (~4500 euro), Nov 2013 – Oct 2014
- **PhD scholarship** in the frame of project POSDRU/88/1.5/S/60185 - *“Innovative doctoral studies in a Knowledge Based Society”* Oct 2009 – Sept 2012

- **Member in 13 national projects and 4 international projects:**
  - PNRR project Component 9, I8 (acronym: *BioPlasmonics*, CF 199/28.11.2022) (Jul 2023 – Jun 2026)
  - Complex Frontier Research Projects: PN-III-P4-ID-PCCF-2016-0142 (2018 - 2022)
  - Complex Exploratory Research Projects: PN-III-P4-ID-PCE-2016-0837 (2017 - 2019), PN-II-ID-PCCE-2011-2-0069 (Jun 2013 – Sept 2016), PN-II-ID-PCCE-2008-0129 (2010 - 2013), PN-II-ID-PCCE-2008-0312 (2010 – 2013)
  - Young Research Teams: PN-III-P1-1.1-TE-2019-1959 (2020 - 2022), PN-III-P1-1.1-TE-2016-2095 (May 2018 - April 2020), PN-II-RU-TE-2014-4-2102 (Nov 2015- Nov 2017), PN-II-RU-TE-2014- 4-0013 (2015-2017)
  - Partnerships: PN-II-PT-PCCA-2013-4-1232 (2014-2017), PN-II-PT-PCCA-2013-2-1961 (2014-2017)
  - Experimental Demonstration Projects: PN-III-P2-2.1-PED-2021-1998 (2022-2024), PN-III-P2-2.1-PED-2019-3345 (2020 - 2022)
  - Bilateral projects Romania-France: contract Nr. 489/2011 (2011-2012), PN-II-CT-RO-FR-2014-20049, PN-II-CT-RO-FR-2014-2-0052 (2015-2016).

## 6. AWARDS

- **2023** - The "Dragomir Hurmuzescu" prize awarded by the Romanian Academy in the Physical Sciences category, for works published in 2021.
- **2023** – Excellence Award for extraordinary results in Physics and "Experienced Researchers - Teams" trophy awarded for The Nanobiophotonics and Laser Microspectroscopy Center, led by Prof. Dr. Simion Aştilean, 1st Romanian Research Gala, Bucharest, 31 Jan 2023
- **2020** - Special Mention award and an Excellence Diploma in the national contest “The Rada Mihalcea Awards for Young Researchers in Science and Engineering”, 6th edition, Cluj-Napoca
- **2017** - Excellence Diploma in Scientific Research from Babeş-Bolyai University, Cluj-Napoca

## 7. ACADEMIC AND PROFESSIONAL ACTIVITIES

- **2023, 2024** – Teaching “Spectrometric analysis methods” course (2<sup>nd</sup> year undergraduate students), Faculty of Biology, Babes-Bolyai University, Romania
- **2021-present**: *Member in 3 PhD student supervision committees*

- **2021 – 2022** - Coordinator of Master's student Markus Zetes winner of a 1-year Special Scholarship for research activity, awarded by Babes-Bolyai University
- **2009 and 2013** - Teaching “Optics” laboratory class (1<sup>st</sup> year undergraduate students), Faculty of Physics, Babes-Bolyai University, Romania
- **Mar - May 2014** – Elaboration and teaching of “Time - resolved fluorescence” laboratory class (master students) - Faculty of Physics, Babes-Bolyai University, Cluj Napoca, Romania
- **2011 - present** - *Scientific co-advisor* for elaboration of 4 B.Sc. and 1 M.Sc. theses
- **Refereeing** for ACS Applied Materials & Interfaces, Nanoscale, Colloids and Surfaces B: Biointerfaces, Materials Research Bulletin, RSC Advances etc;

**Cluj-Napoca, 18.12.2024**