





PERSONAL INFORMATION

Maria-Monica Enculescu



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Sex female | Date of birth 10/08/1972 | Nationality Romanian

WORK EXPERIENCE

2014-present

Senior Researcher I

National Institute of Material Physics (NIMP) www.infim.ro

Main activities and responsibilities: Preparation of nanostructures and their characterization using optical spectroscopy, optical microscopy, cathodoluminescence, scanning electron microscopy, energy dispersed X-ray analysis, X-rays diffraction etc.

[Business or sector](#) Research

2009-2014

Senior Researcher II

National Institute of Material Physics (NIMP) www.infim.ro

Main activities and responsibilities; Nanostructures' synthesis by various methods (electrospinning, spin-coating, template method, solution crystallization) and characterization of their optical and morphological properties.

[Business or sector](#) Research

2002-2009

Senior Researcher III

National Institute of Material Physics (NIMP) www.infim.ro

Main activities and responsibilities; Optical and microscopical studies regarding defects and heavy metals nanostructures in alkali halides.

[Business or sector](#) Research

1998-2002

Scientific Researcher

National Institute of Material Physics (NIMP) www.infim.ro

Main activities and responsibilities: Researches regarding heavy metals nanostructures in alkali halide crystals.

[Business or sector](#) Research

1997-1998

Research Assistant

National Institute of Material Physics (NIMP) www.infim.ro

Main activities and responsibilities: Studies on defects obtained in pure and doped alkali halides.

[Business or sector](#) Research

1996-1997

Debutant Research Assistant

National Institute of Material Physics (NIMP) www.infim.ro

Main activities and responsibilities: Researches in solid state optics and spectroscopy.

[Business or sector](#) Research

EDUCATION AND TRAINING

1996-2002

PhD

Institute of Atomic Physics - University of Bucharest
Optics and Spectroscopy

1996-1997

Master in Science

Faculty of Physics, University of Bucharest
Semiconductor Physics

1990-1995

Licentiate in Physics

Faculty of Physics, University of Bucharest
Polymer Physics

SPECIALIZATION AND QUALIFICATIONS

April 2010

Technological Educational Institution Athens, Department of Electronics, Greece

April- May 2009

University of Bristol, HH Wills Laboratory, Bristol, UK

April 2008

University of Bristol, HH Wills Laboratory, Bristol, UK

October- November 2003

Gesellschaft fur Schwerionenforschung (GSI) Darmstadt, Germany

August - September 2003

Gesellschaft fur Schwerionenforschung (GSI) Darmstadt, Germany

June - August 2003

DAAD Fellowship; GSI, Darmstadt, Germany;

October - December 2002

GSI, Darmstadt, Germany.


PERSONAL SKILLS

Mother tongue(s) Romanian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C2	C2	C2
French	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](#)

Organisational / managerial skills	- 11 grants and projects (8 national and 3 international collaborations) coordinated as director
2002-2003	Youth Grant CNCSIS 111/2001: Ag nanoclusters obtained in KBr:Ag and KI:Ag at room temperature; Project leader
2003-2004	Romanian Academy Grant 246/2003: Aggregates obtained at unconventional coloring in KCl crystals doped with Ag or Cu and codoped with Ca and alkali metals; Project leader
2003-2005	Project CERES 3-64/2003: Effects of heavy ion irradiation in alkali halide crystals; Project leader
2005-2007	Project CEEEX-ET 3175/2005: Self aggregation processes of Ag and Au colloidal nanoparticles in crystalline matrices; Project leader
2006-2008	Project CEEEX 2/2006: Laser active media for IR domain; Project leader
2007-2010	Project IDEI 30/2007: Dye-doped nanorods; Potential media for tunable lasers; Project leader
2010-2011	Royal Society International Joint Project: Protein-based colloidal crystal nanowires; (Romanian – British collaboration) Coordinator NIMP
2011-2014	PNCIDI 2 RU-TE 37/2011: Quasi one-dimensional photonic crystals based on refractive index control of polymer nanofibers; Project leader
2012-2016	PNCIDI 2 - 63/2012 Complex landslide monitoring system using transducers based on new materials and technologies; Coordinator NIMP
2016-2019	IFA-CEA – C05-08/2016 Plasmon enhancement of dye-doped polymer nanofibers' light emissions; (Romanian – French collaboration), Project Leader
2020-2022	ERANET - MANUNET-III-MINaFBioS Molecularly imprinted nanofluidic biosensors for the detection of human derived proteins; (Romanian - Spanish collaboration); Project Leader
	
2003-2005 2006-2008	- Responsible for the scientific cooperations between National Institute of Materials Physics and Gesellschaft für Schwerionenforschung (GSI) Darmstadt, Germany
2013-2019	- Coordinator of economic contracts – Beneficiaries: Actavis SRL, Sindan Pharma SRL, Infomed Fluids SRL SIDE GRUP SRL, KLASS WAGEN SRL, RENAULT COMMERCIAL ROUMANIE SRL, etc.
2019-2022	- Responsible for the scientific cooperation between National Institute of Materials Physics and Carl Zeiss AG, Oberkochen, Germany, ZEISS labs@location .

SELF-ASSESSMENT

Digital competence	Information processing	Communication	Content creation	Safety	Problem solving
		Independent user	Independent user	Independent user	Independent user

Levels: Basic user - Independent user - Proficient user
 Microsoft Office, Photoshop, OriginLab, etc

ADDITIONAL INFORMATION

Publications	- co-author of more than 185 papers in ISI journals - co-author of 3 book chapters; - co-author of 5 patents and 15 patents requests published in BOPI,
Projects	- 11 projects and grants coordinated as leader; (key expert in >20 projects, national PNCIDI and international EEA/NO)
Conferences	- >70 contributions at international conferences
Honours and awards	- Romanian Academy "Dragomir Hurmuzescu" Award for Physics -2009; - Excellency Prize awarded by Ministry of Education and Research -2007;
Fellowship	- DAAD Fellowship –Darmstadt, Germany- 2002;
Citations	- >1400 citations in WOS indexed journals; Hirsch index – 21; - Reviewer for journals: J. Alloys Compd., Spectrochim. Acta A, J. Biol. Chem. Lumin., Plasmonics, Thin Solid Films, Mater. Phys. Chem., J. Phys. Chem. Solids, J. Lumin., J. Cryst. Growth, Solid State Sci., Physica B, J Molec. Struct. etc.