

PERSONAL INFORMATION

Lavinia-Petronela Curecheriu



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Sex F | Nationality Romanian

WORK EXPERIENCE

2009-present

Teaching staff: 2009-2013 associate; 2013-2018 Assistant professor; 2018-2022 Lecturer; 2022-present Associate professor

Course and practical works: Bachelor's degree (including Bălți extension): Technology transfer, General physics, Physics and technology of polarizable media, Physics and technology of nanocomposite materials.

Master's degree: Radiation sources and radiation protection, Practice & Specialized practice.

Laboratory and seminar activities: Physics and technology of polarizable media, Physics and technology of nanocomposite materials, General physics, Classical mechanics; Physics of materials, Electric and magnetic phenomena, Radiation sources.

Department of Physics University „Alexandru Ioan Cuza”, Iași
Teaching

2013-2028

Manager project PN-IV-P1-PCE-2023-1192, PN-III-P1-1.1-TE-2019-1689, PN-III-P1-1.1-TE-2016-1951, PN-II-RU-TE-2012-3-0150

Research

Department of Physics University „Alexandru Ioan Cuza”, Iași
Fundamental research

2011-2024

Researcher in PN-III-P4-ID-PCE-2020-1988, PN-III-P1-1.1-TE-2019-1929, PN-III-P4-ID-PCE-2016-0817, PN-III-P4-ID-PCCF-0175, PN-II-ID-PCE-2011-3-0745, PN-II-PT-PCCA-2013-3-1119

Research

Department of Physics University „Alexandru Ioan Cuza”, Iași
Fundamental research

2022-2024

Mentor in PN-III-P1-1.1-PD-2021-0531

Coordination of research activities

Department of Physics University „Alexandru Ioan Cuza”, Iași

2007-2009

Assistant researcher

Research

Department of Physics University „Alexandru Ioan Cuza”, Iași
Fundamental research

EDUCATION AND TRAINING

2020

Habilitation thesis

	„Alexandru Ioan Cuza” , Iași
2006-2009	PhD thesis Physics, „Alexandru Ioan Cuza” , Iași
2004-2006	Master's degree Applied Physics, „Alexandru Ioan Cuza” , Iași
2000-2004	First in class (average grade 100%; thesis grade: 100%) Bachelor's degree Biophysics, „Alexandru Ioan Cuza” , Iași Average grade 97.1%; thesis grade: 88.9%

PERSONAL SKILLS

Mother tongue(s) Romanian

Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C1	C1	C1
Italian	C2	C2	C1	C1	C1
French	C2	C2	B2	B1	B1

Communication skills Good communication skills: Ability to establish and maintain good working relations

Organisational / managerial skills Experience in management of national grants: CNCSIS - Ministry of Education and Research of Romania – Exploratory Research Projects - PN-IV-P1-PCE-2023-1192 (2025-2028); Young researcher Team- PN-III-P1-1.1-TE-2019-1689 (2020-2022), PN-III-P1- 1.1-TE-2016-1951 (2018-2020), , PN-II-RU-TE-2012-3-0150 (2013-2016), L'Oreal-UNESCO (fellowship 2017) Grant type BD - The individual research grants for the PhD Students (2007- 2009); Grant of CNCSIS - Ministry of Education and Research of Romania, Grant type TD – Young Research Grant (2007-2009), Grant type TE- Young Research Teams (2013-2016)

Computer skills Good command of Office tools, Origin , Basic command of Maple

Other skills Well skilled for laboratory activities:
Physics laboratory: measurements of electric properties of ferroelectric ceramics at low and high frequency; high field measurements of ferroelectric ceramics.
Chemistry labs: preparation of nanopowders and ceramics by classical methods and soft chemistry (core-shell technique)

ADDITIONAL INFORMATION

- Publications** **125** papers, **96 ISI** papers
ISI individual score **42.86**
I=12.33, P=27.73, C=310.9, T=48.81 CNATDCU standard
>**1800** citations without self-citations
Hirsch 30 (WOS), 31 (Scopus), 32 (Google)
More than 150 presentations to international conferences (1 Tutorial talk, 1 Keynote, 16 Invited, 70 Oral presentations)
- Projects** ✓ **Principal investigator in 9 national projects:**
- PN-IV-P1-PCE-2023-1192** - A new tool for designing bi-tunable materials: functionally graded ceramics from core-shell powders, BiTunFGC, 2025-2028, 1.147.368 RON (CNCSIS)
 - PN-III-P1-1.1-TE-2019-1689** - Exploring critical conditions as a new tool for enhancing electrocaloric properties of Ba-based lead-free ceramics, CritEC,2020- 2022, 431.900 RON

(CNCSIS)

- **PN-III-P1-1.1-MC-2019-1164** - Preparation of nanocomposite materials with polymeric matrix and core-shell fillers for flexible electronics, 13200 RON (CNCSIS)
- **PN-III-P1-1.1-TE-2016-1951**-Scale dependence properties in lead-free piezoelectric ceramics, ProLEAF, 2018-2020, 450.000 RON (CNCSIS)
- **L'OREAL- UNESCO** fellowship FOR WOMEN IN SCIENCE, Physics Section, 2017 - Engineered polymeric composites for flexible electronics, 42.000 RON
- **GI-2014-03**, Study of nonlinear properties in lead free relaxor, 2014-2015, 20.000 RON
- **PNII-RU-TE-2012-3-0150**, Investigation of the mesoscopic polar order and size effects in driving polarization mechanisms of tunability in perovskites (IMPOTUN), 2013-2015, 645.833 RON (UEFISCDI)- evaluated A+ at final report;
- **PNII-RU-TD 212/2007**, Contribution to the study of non-linear phenomena in ferroelectric ceramics, 2007-2009, 41.000 RON (CNCSIS);
- **BD- 71/2007** Contribution to the study of non-linear phenomena in ferroelectric ceramics, 2007-2009, 48.000 RON (CNCSIS)

✓ European project:

- **JECS Trust contract 2022303** - Preparation of $\text{BaM}_{1-x}\text{Ti}_{1-x}\text{O}_3$ nanopowders by soft chemistry methods", ICMATE, 2500 euro

✓ 1 international project in Management Committee:

- **COST ACTION MP1308** - Towards oxide-based electronics, 2014-2018

✓ Member in 1 international project

- **Polycom** - Engineered polymeric composites with high energy density (ICMATE- Genoa, ISMAC Genoa, UAIC Iasi), 2016-2018

✓ Member in 16 national projects:

- **P2-AR-CNR-2023-2025** (dir. CS.II dr. Irina Barzic)- Smart functional polymer-based composites for sustainable energy harvesters (2023-2025 – finanțare Academia Română)
- **PN-III-P4-ID-PCE-2020-1988** (dir. CSII. Cristina Ciomaga) – Engineering of lead-free porous ceramic materials for piezo-, pyroelectric sensors with energy harvesting applications (2021-2024)
- **PN-III-P1-1.1-TE-2019-1929** (dir.lect.dr. Leontin Padurariu) – A new material design paradigm in electroceramics:charged defects engineering (2020-2022)
- **PN-III-P3-3.1-PM-RO-FR-2019-0069** (dir. Prof.univ. Liliana Mitoseriu)- multiscale investigations and modeling of novel ferroelectric oxides (2019-2020)
- **PN-III-P4-ID-PCCF-2016-0175** (dir.conf.univ.dr. Aurelian Rotaru)-High-k Nanoparticle Multilayer Dielectrics for Nanoelectronics and Energy Storage Applications (Highkdevice) 2018-2022
- **PN-III-P4-ID-PCE-2016-0817** (dir. Prof.univ. Liliana Mitoseriu)- Fundamental insights on scale-dependent phenomena in barium titanate-based ferroelectrics: critical grain size and effect of nanostructuring (FerroScale) 2017-2019
- **PN-II-RU-TE-2014-4-1494** (dir. dr. Leontin Padurariu)- "Exploatarea porozitatii in materiale feroelectrice prin controlul câmpului local pentru îmbunătățirea proprietăților funcționale (EXPOFER)" 2015-2017
- **PN-II-PT-PCCA-2013-4-1119** (dir. proiect prof. dr. Liliana Mitoseriu)- Magnetoelectric composites with emergent properties for wireless and sensing applications (MECOMAP), 2014-2016
- **PNII-PCCE-2-2011-0006** (dir.proiect CS I dr. Lucian Pintilie)- Efectul interfetelor asupra transportului de sarcina in heterostructuri feroice/multiferoice", 2012-2016
- **PN-II-ID-PCE-2011-3-0745** (dir. proiect prof.dr. Liliana Mitoseriu) -Design de material, preparare, proprietati si modelare de structuri multifunctionale oxidice pentru microelectronica si noi aplicatii in stocare de energie (MULTIFOX), 2011-2016
- **PN-II-ID-PCE-2011-3-0668** (dir proiect prof.dr. Adelina Ianculescu)-Size effects, formation mechanisms and properties in micro- and nanostructured perovskite ferroic systems prepared by alternative methods, 2011-2016
- **Bilateral project Romania-Italy** (dir. proiect prof. dr. Liliana Mitoseriu): Searching for new BaO-TiO-FeO multiferroics: from material design to magnetoelectric applications (MULTIFER), 2013-2014
- **Bilateral project Romania-Slovenia** (dir. proiect prof. dr. Liliana Mitoseriu)- Dielectric spectroscopy and tunability of low-temperature processed complex perovskites (DISTUNAB), 2012-2013
- **PN II –RU TE 187** (Dir. proiect: Dr. Cristina Ciomaga) - Investigarea efectelor de volum, interfață și de percolație în materialele compozite multifuncționale cu geometrie controlată și metamateriale (IMECOMP), 2010-2013
- **Research project type A** (dir.proiect prof.dr. Alexandru Stancu) - Studiul relaxarii magnetice si a comutarii in sisteme nanoparticulate (REL SWITCH), 2006-2008

Awards

- **CEEX-FEROCER** (Dir. proiect: prof.dr. Adelina Ianculescu) Dezvoltarea integrata de noi concepte si tehnologii in sinteza, caracterizarea modelarea si aplicatii ale ceramicilor micro- si nanostructurate, 2006-2008
- ✓ Romanian Academy Award in Physics – Constantin Minculescu 2020 – for the group of papers: Study of the correlation between microstructural characteristics and high-field nonlinear properties of oxide ceramics
- ✓ IAAM Scientist Medal 2019
- ✓ Finalist of UNESCO-L'OREAL For Women in Science in 2016
- ✓ 3rd place "Tineri cercetatori în Știință și inginerie" in 2015
- ✓ Award "IUVENTAS SCIENTIAES" given by UAIC (2014-2015)
- ✓ Prize for excellence by CARPATH research center (2010)

Research stages

- Research stage in PFE project - Susținerea competitivității în cercetare-dezvoltare și inovare prin dezvoltarea capacității instituționale a Universității „Alexandru Ioan Cuza” at ICMATE-CNR, Genoa, Italy – 6 weeks (23 July – 11 September 2023)
- Research stage in European project JECS Trust at ICMATE-CNR, Genoa, Italy – 1 month (1-30 September 2022)
- Research stage in project PN-III-P1-1.1-MC-2019-1164 at ICMATE-CNR, Genoa, Italy – 3 weeks (11 November-2 December 2019)
- Research stage in project PN-III-P1-1.1-TE-2016-1951 at ICMATE-CNR, Genoa, Italy – 6 weeks (29 July-8 September 2019)
- Research stage in project PN-III-P1-1.1-TE-2016-1951 at ICMATE-CNR, Genoa, Italy – 2 weeks (February 2019)
- Research stage in project L'Oreal-UNESCO la ICMATE-CNR and ISMAC-CNR, Genoa, Italy – 2 weeks (February 2018)
- Research stage in project PN-III-P4-ID-PCE-2016-0817 la ICMATE-CNR, Genova, Italia – Genoa, Italy – 2 weeks (September 2017)
- Research stage in project L'Oreal-UNESCO la ICMATE-CNR and ISMAC-CNR, Genoa, Italy – 3 weeks (July-August 2017)
- Research stage STSM COST MP1308 at ICMATE-CNR, Genoa, Italy (November 2016)
- Research stage STSM IC1208 at ICMATE-CNR, Genoa, Italy (July-August 2016)
- Research stage GI-2014-3 at Institute of Energetics and interphases IENI-CNR Genoa, Italy - (16-26 January 2016)
- Research stage GI-2014-3 at Institute of Energetics and interphases IENI-CNR Genoa, Italy - 2 weeks (15-30 August 2015)
- Research STSM COST IC1208 at Institute of Energetics and interphases IENI-CNR Genoa, Italy - 1 month (14 July-14 August 2015)
- Research stage GI-2014-3 at Institute of Energetics and interphases IENI-CNR Genoa, Italy - 2 weeks (29 January-12 February 2015)
- Research stage PN II-RU-TE-2012-3-0150 at Institute of Energetics and interphases IENI-CNR Genoa, Italy - 2 weeks (13-23 November 2014)
- Research stage in bilateral project Romania-Italy at Institute of Energetics and interphases IENI-CNR Genoa, Italy – 1 month (15 July-16 August 2014)
- Erasmus teaching stage- University of Vilnius, Lithuania (6-8 July 2014)
- Research stage in bilateral project Romania-Italy at Institute of Energetics and interphases IENI-CNR Genoa, Italy – 1 month (November 2013)
- Research stage POSDRU/89/1.5/S/49944 at Institute of Energetics and interphases IENI-CNR Genoa, Italy – 2 months (July-September 2011)
- Research stage STSM COST MP0409 at University College Dublin, Ireland – 2 weeks (May 2011)
- Romanian Government Scholarship at Institute of Energetics and interphases IENI-CNR Genoa, Italy – 6 months (October-December 2008, February-May 2009)
- Research stage STSM COST 539, at Instituto de Ciencia de Materiales de Madrid ICMM-CSIC, Madrid, Spain – 2 weeks (May 2009)
- Research stage STSM COST 539, at Institute of Energetics and interphases IENI-CNR Genova, Italia – 6 weeks (April-May 2008)
- ERASMUS fellowship at Institut National Polytechnique de Toulouse-ENSEEIH, Toulouse, France - 4 months (March-June 2005)

1.10.2025

