

# Laura HROSTEA

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## ● WORK EXPERIENCE

### ➤ 02/2021 – current: **ASSISTANT RESEARCH SCIENTIST**

RAMTECH Center, Institute of Interdisciplinary Research, Al. I. Cuza University, bd. Carol I, nr.11, 700506, Iasi, Romania

Research Activity (Fabrication and characterization of materials and devices used in photonic and photovoltaic applications)

<http://www.ramtech.uaic.ro/>

### ➤ 10/2020 – present – **UNIVERSITY TEACHING ASSISTANT**

Faculty of Physics, Alexandru Ioan Cuza University of Iasi and (2020) Physics Department, Technical University of Iasi, Iasi, Romania

Academic and Educational Activities (General Physics Practical work)

### ➤ 09/2020 – 06/2021 – **ENGLISH TEACHER**

TWINKLE STAR – CAMBRIDGE ASSESSMENT ENGLISH, Iasi, Romania

Academic and Educational Activities (English classes)

### ➤ 01/2016 – 06/2017 – **SCIENCE TEACHER SECONDARY SCHOOL**

SEVEN HILLS INTERNATIONAL SCHOOL, Iasi, Romania

Academic and Educational Activities (Physics and Chemistry Classes)

## ● EDUCATION AND TRAINING

### ➤ 10/2017 – 10/2020 – **DOCTOR OF PHILOSOPHY IN PHYSICS**

Alexandru Ioan Cuza University of Iasi, bd. Carol I, nr. 11, Iasi, Romania and Angers University, 2 bd Lavoisier, 49000, Angers, France

Co-directed thesis established between UAIC, Iasi, Ro and UA, Angers, France, supported by French Government Grant and by Erasmus + 2018 - 2020

Thesis: *Study of optical and electronic transport properties of some thin films (based on conjugated polymers) for organic solar cell applications*

### ➤ 06/2014 – 12/2019 – **ERASMUS STUDENT**

Angers University, 2 bd. Lavoisier, Angers, France

*Study of some physico-chemical properties of thin films used in photovoltaic applications (AZO thin films, Bi<sub>2</sub>O<sub>3</sub> thin films, polymers thin films, silicon thin films)* developed during five ERASMUS internships.

### ➤ 10/2015 – 07/2017 – **MASTER OF SCIENCE IN PHYSICS**

Alexandru Ioan Cuza University of Iasi, bd. Carol I, nr. 11, Iasi, Romania

Master Thesis: *Study of alternative multilayer transparent electrode structures for thin-film solar cells*

### ➤ 10/2012 – 07/2015 – **BACHELOR OF SCIENCE IN PHYSICS**

Alexandru Ioan Cuza University of Iasi, bd. Carol I, nr. 11, Iasi, Romania

Bachelor thesis: *Thin Film Organic Solar Cells*

## ● LANGUAGE SKILLS

**Mother tongue(s):** ROMANIAN

**Other language(s):**

|                | UNDERSTANDING |         | SPEAKING          |                    | WRITING |
|----------------|---------------|---------|-------------------|--------------------|---------|
|                | Listening     | Reading | Spoken production | Spoken interaction |         |
| <b>ENGLISH</b> | C1            | C1      | C1                | C1                 | C1      |

|         |    |    |    |    |    |
|---------|----|----|----|----|----|
| FRENCH  | B2 | B2 | B2 | B2 | B2 |
| SPANISH | B1 | B1 | B1 | B1 | B1 |

## ● VOLUNTEERING

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09/2013 – 09/2022

Alexandru Ioan Cuza University of Iasi

1. "Researchers' Night" Event organized by Faculty of Physics: Voluntary activities - presentation of didactic materials and experiences
2. Service Department for Students and Graduates: Voluntary Activities - ambassador of the university

## ● RESEARCH

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- H-index: 5 (WOS), 94 WOS citations (80 without self-citations), 9 WOS papers, more than 20 domestic and international conference attendances as speaker
- Project Manager - *Charge Carrier Mobility by Photo-CELIV in Organic Solar Cells based on new ternary blends*, **PN-III-P1-1.1-PD-2021, Contract nr PD70/2022.**
- Project Manager - *Study of photoconductivity processes and optical properties of some organic thin films for solar cell applications* - **UAIC Internal Grant - GI-UAIC-2021-07**
- Team member in the in-progress project: PN III, Programul 3 - Cooperare Europeana și Internațională, Subprogramul Orizont 2020, Organism Finanțator: UEFISCDI (România) și Comisia Europeană Titlu Proiect: Testarea pe teren a unui nod repetitor cuantic integrat, Contract de Finanțare NR. 283/2022, Cod proiect: COFUND-QUANTERA-2-InQuRe; Valoare contract: 989.990 lei, Durata 36 luni.
- Team member in the in-progress project: “*Counter-propagating Optical Parametric Interactions for Quantum Photonics with long coherence time two-photon states - COPI-QuP*”, **project number PCE 142/15.02.2021**, project director: CS II dr. Sorin TASCU.
- COMPETENCES AREAS
  - Main research field: Expertise in conjugated polymer thin films for solar cell applications, involving preparation processes by spin coating and their characterization by different analysis techniques: optical properties (by spectrophotometry, ellipsometry), electrical properties (e.g. electrical resistivity, mobility of charge carriers by charge extraction by linearly increasing voltage - CELIV), morphological properties (by atomic force microscopy, determination of hydrophobicity), structural properties (by X-ray diffraction), etc.

08.12.2022

