






PERSONAL INFORMATION **Elena Laura Abramiuc**

 National Institute of Materials Physics
 (+4) 0212418238  (+4) 0727408180
 laura.stoflea@infim.ro
 <http://infim.ro/users/~elena-laura-abramiuc-stoflea>

Sex F | Date of birth 20/11/1988 | Nationality Romanian

WORK EXPERIENCE

2012 - Present

Scientific Researcher

National Institute of Materials Physics

Str. Atomistilor nr. 405 A, Măgurele, Ilfov, Romania

- Attending experiments in surface science involving preparation and characterization of thin films based on Molecular Beam Epitaxy (MBE), Auger Electron Spectroscopy (AES), Low Energy Electron Diffraction (LEED), X-Ray Photoelectron Spectroscopy (XPS)

Business or sector Research

EDUCATION AND TRAINING

2014-Present

Ph.D. Student

Physics Faculty – University of Bucharest

405 Atomistilor Str., Măgurele (Romania)

Condensed Matter Physics, Thesis: „Study of charge accumulation and reactivity of surfaces exhibiting ferroelectric polarization”, supervised by Asoc. Prof. CS1 Lucian Pintilie

Master of Science (M.Sc.)

2011-2013

Faculty of Applied Chemistry and Materials Science – University Politehnica of Bucharest (Romania)

Specialization Pharmaceutical and Cosmetic Products,

Thesis: “Advanced methods of synthesis and characterization of magnetic nanoparticles for biomedical applications”, supervised by Conf. Dr. Ing. George Marton

2007-2011

Bachelor of Science (B.Sc.)

Faculty of Applied Chemistry and Materials Science – University Politehnica of Bucharest (Romania)

Specialization Science and Engineering of Oxide Materials and Nanomaterials,

Thesis: “Drying oxide materials in microwave field”, supervised by Conf. Dr. Zeno Ghizdavet

Secondary School

Stefan Odobleja High School

2003-2007

Bucharest (Romania)

Mathematics and Computer Science Class

PERSONAL SKILLS

Mother tongue(s) Romanian

Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	B2	B2	C1
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](#)

Communication skills ▪ Basic communication skills gained during oral presentations during school

Job-related skills ▪ Good skills regarding data acquisition, data manipulation, vacuum techniques

Digital competence

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
Proficient user	Proficient user	Independent user	Independent user	Independent user

Levels: Basic user - Independent user - Proficient user
[Digital competences - Self-assessment grid](#)

- good programming skills (IgorPro) gained during school and and work
- good command of office suite (word processor, spread sheet, presentation software)

Driving licence B

Publications

- [1] Bucur IC, Apostol NG, Stoflea LE, Tănase LC, Tache CA, Lungu GA, Costescu RM, Chirilă CF, Trupina L, Pintilie L, Teodorescu CM, *Room temperature ferromagnetism and its correlation to ferroelectricity of manganese embedded in lead zirco-titanate*, **Thin Solid Films**, doi: [10.1016/j.tsf.2018.11.018](https://doi.org/10.1016/j.tsf.2018.11.018) (2018).
- [2] Tănase LC, Abramiuc LE, Popescu DG, Trandafir A-M, Apostol NG, Bucur IC, Hrib L, Pintilie L, Pasuk I, Trupina L, Teodorescu CM, *Polarization Orientation in Lead Zirconate Titanate (001) Thin Films Driven by the Interface with the Substrate*, **Physical Review Applied**, Vol. 10 (2018).
- [3] Bucur IC, Tănase LC, Stoflea EL, Lungu GA, Chirilă C, Trupina L, Apostol NG, Costescu RM, Negrea RF, Pintilie L, Teodorescu CM, *Triggering surface ferroelectric order in Pb(Zr,Ti)O₃ (001) by deposition of platinum*, **Applied Surface Science**, Vol. 432, p. 27 (2018). [4] Abramiuc EL, Tănase LC, Barinov A, Apostol NG, Chirilă C, Trupina L, Pintilie L, Teodorescu CM, *Polarization landscape effects in soft X-ray-induced surface chemical decomposition of lead zirco-titanate, evidenced by photoelectron spectromicroscopy*, **Nanoscale**, Vol. 9, p. 11055-11067 (2017).
- [5] Tănase LC, Lungu GA, Abramiuc EL, Bucur IC, Apostol NG, Costescu RM, Tache CA, Macovei D, Barinov A, Teodorescu CM, *Long-range magnetic interaction in Mn_xGe_{1-x}: structural, spectromicroscopic and magnetic investigations*, **Journal of Materials Science**, Vol. 52, p.3309-3320 (2017).
- [6] L. C. Tănase, L. E. Abramiuc, C.M. Teodorescu, *Photoelectron Spectroscopic and Microspectroscopic Probes of Ferroelectrics*, **TIM17 PHYS. CONF.** 1916 (2017).
- [7] Beșleagă C, Abramiuc EL, Tănase LC, Stancu V, Tomulescu AG, Sima M, Trincă L, Plugaru N, Pintilie L, Nemnes GA, Iliescu M, Svavarsson HG, Manolescu A, Pintilie I, *Iodine Migration and Degradation of Perovskite Solar Cells Enhanced by Metallic Electrodes*, **Journal of Physical Chemistry Letters**, Vol. 7(24), p. 5168-5175 (2016).
- [8] Tănase LC, Apostol NG, Abramiuc EL, Tache CA, Hrib L, Trupină L, Pintilie L, Teodorescu CM, *Ferroelectric triggering of carbon monoxide adsorption on lead zirco- titanate (001) surfaces*, **Scientific**

- Reports**, Vol. 6, p. 35301(1-18) (2016). [9] Tănase LC, Bocîrneă AE, Serban AB, Abramiuc LE, Bucur IC, Lungu GA, Costescu RM, Teodorescu CM, *Growth mechanisms and band bending in Cu and Pt on Ge(001) investigated by LEED and photoelectron spectroscopy*, **Surface Science**, Vol. 653, p. 97-106 (2016).
- [10] Apostol NG, Stoflea LE, Tănase LC, Bucur IC, Chirilă C, Negrea RF, Teodorescu CM, *Band bending at copper and gold interfaces with ferroelectric Pb(Zr,Ti)O₃ investigated by photoelectron spectroscopy*, **Applied Surface Science**, Vol. 354, p. 459-468 (2014).
- [11] Pintilie L, Ghica C, Teodorescu CM, Pintilie I, Chirilă C, Pasuk I, Trupină L, Hrib L, Boni AG, Apostol NG, Abramiuc LE, Negrea R, Stefan M, Ghica D, *Polarization induced self-doping in epitaxial Pb(Zr_{0.20}Ti_{0.80})O₃*, **Scientific Reports**, Vol. 5, p. 14974 (2015). [12] Stoflea LE, Apostol NG, Trupină L, Teodorescu CM, *Selective adsorption of contaminants on Pb (Zr, Ti) O₃ surfaces shown by X-ray photoelectron spectroscopy*, **Journal of Materials Chemistry A**, Vol. 2, p. 14386-14392 (2014).
- [13] Stoflea LE, Apostol NG, Chirila C, Trupina L, Negrea R, Pintilie L, Teodorescu CM, *Schottky barrier versus surface ferroelectric depolarization at Cu/Pb(Zr, Ti)O₃ interfaces*, **Journal of Materials Science**, Vol. 49, p. 3337-3351 (2014). [14] Opris CM, Pavel OD, Moragues A, El Haskourib J, Beltran D, Amoros P, Marcos MD, Stoflea LE, Parvulescu VI, *New multicomponent catalysts for the selective aerobic oxidative condensation of benzylamine to N-benzylidenbenzylimine*, **Catalysis Science & Technology**, accepted DOI: 10.1039/C4CY00795F (2014).
- [15] Lungu GA, Stoflea LE, Tanase LC, Bucur IC, Radutoiu N, Vasiliu F, Mercioniu I, Kuncser V, Teodorescu CM, *Room Temperature Ferromagnetic Mn:Ge(001)*, **Materials**, Vol. 7, p. 106-129 (2014)
- [16] Neatu F, Ciobanu M, Stoflea LE, Frunza L, Parvulescu VI, Michelet M, *Arylation of alkynes over hydrotalcite docked Rh-m-TPPTC complex*, **Catalysis Today** (2014).
- [17] Apostol NG, Stoflea LE, Lungu GA, Tache CA, Popescu DG, Pintilie L, Teodorescu CM, *Band bending at free Pb(Zr,Ti)O₃ surfaces analyzed spectroscopy by X-ray photoelectron*, **Materials Science and Engineering: B**, Vol. 178, p. 1317-1322 (2013).
- [18] Apostol NG, Stoflea LE, Lungu GA, Tanase LC, Chirila C, Frunza L, Pintilie L, Teodorescu CM, *Band bending in Au/Pb(Zr,Ti)O₃ investigated by X-ray photoelectron spectroscopy: Dependence on the initial state of the film*, **Thin Solid Films**, Vol. 545, p. 13-21 (2013).
- [19] Apostol NG, Stoflea LE, Lungu GA, Chirila C, Trupina L, Negrea RF, Ghica C, Pintilie L, Teodorescu CM, *Charge transfer and band bending at Au/Pb(Zr_{0.2}Ti_{0.8})O₃ interfaces investigated by photoelectron spectroscopy*, **Applied Surface Science**, Vol. 273, p. 415-425 (2013).
- [20] Lungu GA, Apostol NG, Stoflea LE, Costescu RM, Popescu DG, Teodorescu CM, *Room Temperature Ferromagnetic, Anisotropic, Germanium Rich FeGe(001) Alloys*, **Materials**, Vol. 6, p. 612-625 (2013).

