



**Curriculum vitae
Europass**

Personal information

First name / Surname	Sfirloaga Paula		
Address	Ghiroda, Timis, Romania		
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E-mail	paulasfirloaga@gmail.com		
Nationality	Romanian		
Date of birth	11.05.1976		
Gender	Female		

Work experience

	Dates	2003, November – Present
Occupation or position held	Scientific Director Scientific Researcher I	
Main activities and responsibilities	☐ Coordination of activities, Management, scientific research (chemical engineering, electrochemistry, environmental protection) <ul style="list-style-type: none">○ Chair of the Gender Equality Committee (2026–present)○ Chair of the Ethics Committee (2024–2026)○ Member of the Ethics Committee (2022–2024)	
Name and address of employer	National Institute for Research and Development in Electrochemistry and Condensed Matter, Dr. A. Păunescu-Podeanu, no.144, Timisoara, Romania	
Type of business or sector	Research and Development	

Dates	January 2016 November 2023
Occupation or position held	CS I Dr. Head of Chemical and Electrochemical Syntheses Department
Main activities and responsibilities	Coordination of activities, Management, scientific research (chemical engineering, electrochemistry, environmental protection)
Name and address of employer	National Institute for Research and Development in Electrochemistry and Condensed Matter, Dr. A. Păunescu-Podeanu, no.144, Timisoara, Romania
Type of business or sector	Research and Development
Dates	July 2008-October 2013
Occupation or position held	CS II Dr. Head of Electronic and Optical Microscopy Laboratory
Main activities and responsibilities	Coordination of activities, Management, scientific research (chemical engineering, electrochemistry, environmental protection)
Name and address of employer	National Institute for Research and Development in Electrochemistry and Condensed Matter, Dr. A. Păunescu-Podeanu, no.144, Timisoara, Romania
Type of business or sector	Research and Development
Education and training	
Dates	June 2014-December 2015
Title of qualification awarded	
Principal subjects/occupational skills covered	☐ Synthesis and characterization of different materials with applications in environmental protection, energy energy and water decontamination; ☐ Qualitative and quantitative characterization of materials - Electron microscopy
Name and type of organisation providing education and training	The West University of Timișoara
Dates	October 2007-September 2010
Title of qualification awarded	<i>PhD Chemical Engineering PhD</i>

Principal subjects/occupational skills covered	<ul style="list-style-type: none"> - Synthesis method of functionalized zeolite with un-doped and doped TiO₂ - Design of laboratory equipment for functionalized zeolite with un-doped and doped TiO₂ obtaining - Development of functionalized zeolite with un-doped and doped TiO₂ obtaining methods - Characterization method - Tests of bactericidal effect of functionalized zeolite with un-doped and doped TiO₂. 				
Name and type of organisation providing education and training	University „Politehnica” of Timisoara, Faculty of Industrial Chemistry and Environmental Engineering				
Dates	October 2003-July 2005				
Level in national or international classification	<i>Post-university studies</i>				
Principal subjects/occupational skills covered	Optical and spectroscopy of laser materials				
Name and type of organisation providing education and training	The West University of Timișoara				
Dates	October 1999-July 2003				
Title of qualification awarded	<i>Physicist</i>				
Principal subjects/occupational skills covered	<ol style="list-style-type: none"> 1. Thermodynamic physics and quantum mechanics 2. Analysis spectrometric methods 3. Electricity and magnetism 				
Name and type of organisation providing education and training	The West University of Timișoara				
Mother tongue	Romanian				
Foreign language (s) known					
Self-assessment					
European level (*)					
	Understanding		Speaking		Writing
	<i>Listening</i>	<i>Reading</i>	<i>Spoken interaction</i>	<i>Spoken production</i>	
English	C2	B2	B2	B2	B2
French	C1	C1	C1	C1	B1
	(*) <u>Common European Framework of Reference for Languages</u>				

Social skills and competences	<ul style="list-style-type: none"> - Extremely organised person - End-oriented work capacity - Problem-solving attitude - Responsibility, Self-respect and self-reliance
Organisational skills and competences	<p>24 -27.09.2007 – Diploma for participation at summer school „Nanomateriale – viziune si strategii”, Timisoara, organized by INCEMC Timisoara and IMT Bucuresti;</p> <p>27.10 -05.11.2008 – Course in project management, the Chamber of Commerce, Industry and Agriculture, Timisoara;</p> <p>18 -22.03.2010 – Participation Certificate “Fuel Cells. Theoretical and Practical Aspects” presented by Prof. dr.dr.h.c. Joop Schoonman, din TU Delf, Olanda.</p> <p>20-22 June 2011- Certificate "Liquid chromatography coupled with mass spectrometry (HPLC-MS)", Timisoara;</p>
Computer skills and competences	<p>Microsoft Office™ (Word™, Excel™ and PowerPoint™);</p> <p>OriginPro8;</p> <p>PANalytical X”Pert High Score Plus.</p>
Driving licence	<p>Yes</p> <p>Affiliation - membership of:</p> <ul style="list-style-type: none"> - Romanian Society of Electrochemistry - Romanian Association for Nonconventional Technologies - Romanian Physical Society

Scientific activity:

- ✓ **130 works published in ISI journals; 5 ISI indexed proceedings; over 77 papers presented at international conferences (Appendix 1);**
- ✓ **Member of the *BODY OF EXPERTS FROM THE NATIONAL REGISTER OF EXPERTS FOR THE CERTIFICATION OF RESEARCH-DEVELOPMENT ACTIVITY (REXCD)*, BY MCID ORDER NO. 20242/13.02.2023; National Smart Area of Specialization: Advanced Functional Materials.**
- ✓ **Expert evaluator** within the scientific evaluation committee of the Henri Coandă Scholarships, **Advanced Functional Materials field.**

Patents and patent applications

- ✚ P. Sfirloaga, S. Novaconi, P. Vlazan, I. Grozescu, *Synthesis process of materials based on SnTe in ultrasonic field with immersed sonotrode*, **A/0035/2011**.
- ✚ C. Lazau, C. Bandas, P. Sfirloaga, S. Novaconi, I. Grozescu, *Process for obtaining natural zeolites functionalized with undoped TiO₂ nanocrystals by the rapid hydrothermal method*, **A00252/22.03.2011**.
- ✚ P. Sfirloaga, C. Mitrea, P. Vlazan, M. Poienar, A. Baracu, *Process for obtaining a sensitive platform based on sensors with surface acoustic waves based on materials with a perovskite structure*, **Patent No. 134619, 30.05.2022**.
- ✚ P. Sfirloaga, I. Balcu, D. Buzatu, C. Macarie, L. Cernescu, *Process for obtaining organic-inorganic hybrid perovskite materials*, **A/00545/03.10.2023**.
- ✚ P. Sfirloaga, B. Taranu, *Process for obtaining modified electrodes with perovskite materials with application in water electrolysis*, **A/00552/05.10.2023**.
- ✚ P. Sfirloaga, I. Balcu, C. Macarie, P. Vlazan, *Process for obtaining perovskite materials of the YMnO₃ type*, **A/00500/13.09.2023**.
- ✚ P. Sfirloaga, A. E. Cata, I. M. C. Ienascu, A.-E. Lazar, N.-S. Tolea, *Process for obtaining hybrid materials based on polyvinylpyrrolidone functionalized with perovskite structures*, **A/00577/19.10.2023**.
- ✚ Chakraborty Deb Kumar, Ghangrekar Makarand, Jadhav Gorakhanath, Anil Anil, Duteanu Narcis Mihai, **Sfirloaga Paula**, *Integrated pressurized hydrolysis process using a superior inoculum for bio-hydrogen and bio-methane generation via two-stage anaerobic degradation of kitchen waste*, **A00096/13.03.2025**.
- ✚ **Sfirloaga Paula**, Buzatu Doru, Balcu Ionel, Macarie Corina, *Procedeu de obținere a unui compozit perovskit-grafenă cu proprietăți îmbunătățite*, **A00288/18.09.2025**.

Research projects

Project director:

- ✓ **POC/1025/1/3 – Spin-off within the "INO-SEN-Innovative Technology for the realization of SENSors for greenhouse gases" project; 2023.**
- ✓ **PN-III-P2-2.1- Experimental demonstrative project: Advanced Technologies for High Selectivity Detection of Organophosphate - Nerve Agent Simulants in Societal Security Applications, 2022-2024.**
- ✓ **PN-III-P2-2.1- Experimental demonstrative project: A new Approach to the Development of a Sensor for Selective Monitoring of Harmful Gases Using Low-Cost and Eco-Friendly Materials (January 2017-July 2018).**
- **Postdoctoral project: Advanced thermoelectric materials with perovskite structure for applications in energy recovery, POSDRU/159/1.5/S/137750: 18 months (2014-2015).**

Project responsible:

- ✓ **PN Organic-Inorganic Hybrid Materials: A New Approach for Bifunctional Catalysts with Advanced Performance in the Electrochemical Decomposition of Water - 29N/2023 (2023-2026).**
- ✓ **PN Innovative nanotechnologies for obtaining advanced hybrid materials with applications in environmental protection - PN 19 22 02 01 (2019-2022);**
- ✓ **PN Development of ABO₃ type multifunctional materials and study of physicochemical properties – PN 1614 0305- (2016-2017).**
- ✓ **PNII Innovative technology for biohydrogen production from wastewater as renewable energy source (BIOSIM) 49/2012 – (2015-2016);**
- ✓ **PN Development of ABO₃ type multifunctional materials and study of physicochemical properties – PN 1614 0305 - (2016);**
- ✓ **PN Studies regarding the synthesis and characterization of binary compounds based on SnTe with advanced thermoelectric properties - PN 09 34 02 02 (2008 - 2011).**

Book chapters

- ✓ A review of perovskite-type materials: from synthesis to applications, **Sfirloaga, Paula;** Poienar, Maria; Vlazan, Paulina, Environmental Remediation in Agri-Food Industry Using Nanotechnology and Sustainable Strategies, Book Chapter, **2025.**
- ✓ A Comparative Study Between Different Corrosion Protection Layers, Adina-Elena Segneanu, **Paula Sfirloaga,** Ionel Balcu, Nandina Vlatanescu and Ioan Grozescu, "Environmental and Industrial Corrosion - Practical and Theoretical Aspects", ISBN 978-953-51-0877-1, December 12, **2012.**
- ✓ Waste Water Treatment Methods, Adina Elena Segneanu, Cristina Orbeci, Carmen Lazau, **Paula Sfirloaga,** Paulina Vlazan, Cornelia Bandas and Ioan Grozescu, ISBN 978-953-51-0928-0, January 16, **2013.**
- ✓ Organic Compounds FT-IR Spectroscopy, Adina Elena Segneanu, Ioan Gozescu, Anamaria Dabici, **Paula Sfirloaga** and Zoltan Szabadai, Chemistry» Organic Chemistry» "Macro To Nano Spectroscopy", ISBN 978-953-51-0664-7, June 29, **2012.**
- ✓ Peptide and Amino Acids Separation and Identification from Natural Products, Ion Neda, Paulina Vlazan, Raluca Oana Pop, **Paula Sfarloaga,** Ioan Grozescu and Adina-Elena Segneanu, Chemistry» Analytical Chemistry» "Analytical Chemistry", ISBN 978-953-51-0837-5, November 7, **2012.**
- ✓ Synthesis methods of the oxides, Authors: Antoanetta Lungu, Paulina Vlazan, **Paula Sfirloagă,** Maria Poienar, Book: Oxide materials: fundamentals, challenges and perspectives, Cambridge Scholars, 2022.
- ✓ Methods of morpho-structural characterization and for determination of the electrical and magnetic properties of metallic oxides, **Paula Sfirloagă,** Maria Poienar, Paulina Vlazan, Antoanetta Lungu, Mihail Lungu, Iosif

- Malaescu, Catalin N. Marin, Aurel Ercuța, Book: Oxide materials: fundamentals, challenges and perspectives, Cambridge Scholars, 2022.
- ✓ Oxide materials with spinel structure, Paulina Vlăzan, Antoanetta Lungu, **Paula Sfirloagă**, Catalin N. Marin, Aurel Ercuța, Iosif Malaescu, Book: Oxide materials: fundamentals, challenges and perspectives, Cambridge Scholars, 2022.
 - ✓ Ceramic materials with perovskite structure, **Paula Sfirloagă**, Paulina Vlăzan, Catalin N. Marin, Iosif Malaescu, Book: Oxide materials: fundamentals, challenges and perspectives, Cambridge Scholars, 2022.
 - ✓ Applications, Iosif Malaescu, Maria Poienar, **Paula Sfirloagă**, Paulina Vlăzan, Antoanetta Lungu, Mihail Lungu, Catalin N. Marin, Aurel Ercuța, Book: Oxide materials: fundamentals, challenges and perspectives, Cambridge Scholars, 2022.

17.09.2026



ISI papers

- 1) In Situ Buffering and Enzymatic Regulation of Acidogenesis in TwoStage Anaerobic Digestion of Composite Vegetable Waste, Debkumar Chakraborty, Abhishek Pitta, Makarand Ghangrekar, Gorakhanath Jadhav, Anil Dhanda, **Paula Sfirloaga**, Narcis Duteanu, *Scientific Reports*, **2026**. <https://doi.org/10.1038/s41598-026-57332-5>.
- 2) Synergistic effects of enriched inoculum and headspace pressure on acidogenesis and its effect on methane yield in two-stage anaerobic digestion of food waste, Debkumar Chakraborty, Anil Dhanda, Gorakhanath Sadashiv Jadhav, Abhishek Pitta, Makarand M. Ghangrekar, Jonathan W.C. Wong, **Paula Sfirloaga**, Narcis Duteanu, *Renewable Energy* Volume 274, 15 October **2026**, 126141.
- 3) Evaluation of the alkaline water splitting electrocatalytic activity of cobalt(II) phosphates materials, Maria Poienar, **Paula Sfirloaga**, Gabriel Buse, Daniel Vizman, Paula Svera, Bogdan-Ovidiu Taranu, *Ceramics International*, **2026**.
- 4) Semiconductor–Conductor Transition Analysis by Low-Frequency Impedance in Ultrasonically Synthesized Al-Doped Sodium Tantalate, Catalin N. Marin, Madalin O. Bunoiu, **Paula Sfirloaga** and Iosif Malaescu, *Crystals* **2026**, 16, 306.
- 5) Multiple technique analysis of pottery and clay samples from the Neolithic settlement Șoimuș—Teleghi (Romania), Gabriela Ursuț, Dan Vlase, Gabriela Vlase, Alexandra Cioponea, Alexandru Pahomi, **Paula Sfirloaga**, Ioan Alexandru Bărbat, Florin Manea, Ionela-Amalia Potinteu, Laura Pitulice, Titus Vlase, *Journal of Thermal Analysis and Calorimetry*, **2026**, <https://doi.org/10.1007/s10973-026-15429-z>.
- 6) Noble Metal-Doped Perovskite–GO Hybrids as Efficient Electrocatalysts for AlkalineWater Electrolysis, Bogdan-Ovidiu Taranu, Paula Svera, Doru Buzatu, Maria Poienar and **Paula Sfirloaga**, *Nanomaterials* **2026**, 16, 107.
- 7) Sustainable Valorization of Spent Garnet Wastes in Construction Eco-Materials: Validation Stage of Performance Assessment, Cornelia Baera, Ana-Cristina Vasile, Aurelian Gruin, **Paula Sfirloaga**, Claudiu-Sorin Dragomir, Raul Zaharia, Ionel Balcu, Corina Macarie and Doru Buzatu, *Sustainability* **2026**, 18, 1000.
- 8) Study of the Electrical Conduction Mechanism in Low-Frequency Field for CuMnO₂ Crednerite-Type Materials Obtained by Microwave-Assisted Hydrothermal Synthesis, Catalin N. Marin, Maria Poienar, Antoanetta Lungu, Cristian Casut, Paula Sfirloaga, and Iosif Malaescu, *Crystals* **2025**, 15, 497.

- 9) Co- and Sn-Doped YMnO_3 Perovskites for Electrocatalytic Water-Splitting and Photocatalytic Pollutant Degradation, **P., Sfirloagă, S.I., Bognár, T.O., Bogdan, M., Poienar, D., Šojić Merkulov, Coatings, 2025, 15, 475.**
- 10) Hybrid Magneto-Responsive Composites Made from Recyclable Components: Tunable Electrical Properties Under Magnetic and Mechanical Fields, I., Bica, E.M., Anitas, **P., Sfirloaga, L., Chirigiu, A.M., Gavrilovici, Journal of Composites Science, 2025, 9, 219.**
- 11) Thermal Treatment and Polymer Matrix Diffusion Effects on Hydroxyapatite Particle Size Evolution, Pahomi, A., Potinteu, I.-A., Tășală, A.-M., ... **Sfirloaga P, Vlase, G., Budiul, M.M., Polymers, 17(17), 2323, 2025.**
- 12) Antimicrobial and Anti-Inflammatory Activity of N-(2-Bromo-phenyl)-2-hydroxy-benzamide Derivatives and Their Inclusion Complexes, Ienașcu, I.M.C.; Căta, A.; Lazăr, A.E.; Popescu, I., **Sfirloaga P.; Pop, R., Pharmaceutics 17(7), 869, 2025.**
- 13) Research Progress on Development of PVP-Ag-Doped LaMnO_3 Composites for Methyl Orange Degradation, Adina Căta, Madalina-Gabriela Ivanovici, Paula Svera, Ioana Maria Carmen Ienascu, and **Paula Sfirloaga, Metals 2025, 15, 151.**
- 14) A Comparative Analysis of the Electrical Properties of Silicone Rubber Composites with Graphene and Unwashed Magnetite, Malaescu, Iosif; **Sfirloaga, Paula;** Bunoiu, Octavian; Marin, Catalin N., *Materials*, **2024**, Article number 6006.
- 15) New PVP–Ag or Pd-Doped Perovskite Oxide Hybrid Structures for Water Splitting Electrocatalysis, Adina Căta, Bogdan-Ovidiu Tăranu, Ioana Maria Carmen Ienascu and **Paula Sfirloaga, Appl. Sci. 2024, 14, 1179.**
- 16) Exploiting the Bi-doping effect on the properties of NaNbO_3 perovskite -type materials, Paulina Vlazan, Maria Poienar, Iosif Malaescu, Catalin N. Marin, Cristian Casut, **Paula Sfirloaga, Chemical Physics, Volume 579, 1 March 2024, 112203.**
- 17) Dental Biopolymer Composites with Antibiotics, Bisphosphonate, and Hydroxyapatite for Possible Use in Bone Tissue Regeneration, Budiul, Mihaela; Maria Vlase, Gabriela; Negru, Daniel; Okolišan, Dorinel; Bradu, Ionela-Amalia; Tășală, Alexandra; Pahomi, Alexandru; Vlase, Titus; Jumanca, Daniela; Galuscan, Atena; **Sfirloaga, Paula;** Carabă, Nicoleta; *Journal of Chemistry*; **2024**, Article number 6614044.
- 18) Experimental Investigations on the Electrical Conductivity and Complex Dielectric Permittivity of $\text{Zn}_x\text{Mn}_{1-x}\text{Fe}_2\text{O}_4$ ($x = 0$ and 0.4) Ferrites in a Low-Frequency Field, Iosif Malaescu, **Paula Sfirloaga,** Catalin N. Marin, Madalin O. Bunoiu and Paulina Vlazan, *Crystals* **2024, 14, 437.**

- 19) Experimental Investigations of the AC-Conductivity in NaTaO₃ Ceramic Materials Doped with Cu and Al Metal Ions, Malaescu, Iosif; **Sfirloaga, Paula**; Marin, Catalin N., Metals, **2024**, Article number 793.
- 20) Revealing the Impact of Ga and Y Doping on Thermal and Electrical Behavior of LaMnO₃ Ceramic Materials, Paulina Vlazan, Catalin Nicolae Marin, Iosif Malaescu, Gabriela Vlase, Titus Vlase, Maria Poienar, and **Paula Sfirloaga**, Appl. Sci. **2024**, 14, 1546.
- 21) Addressing electrocatalytic activity of metal-substituted lanthanum manganite for the hydrogen evolution reaction, **Sfirloaga, Paula**; Taranu, Bogdan-Ovidiu; Poienar, Maria; Vlazan, Paulina, Surfaces and Interfaces, Volume 39, **2023** Article number 102881.
- 22) Nanoplatfrom-based analysis for the detection of HER3 and HER4 for gastric cancer diagnosis, Gheorghe, D.-C., Stefan-Van Staden, R.-I., Ilie-Mihai, R.-M., **Sfirloaga, P.**, **2023**, Nanotechnology 34 (34), 345101.
- 23) A Cotton Fabric Composite with Light Mineral Oil and Magnetite Nanoparticles: Effects of a Magnetic Field and Uniform Compressions on Electrical Conductivity, Iacobescu, G.-E., Bunoiu, M., Bica, I., **Sfirloaga, P.**, Chirigiu, L.-M.-E., **2023**, Micromachines 14(6),1113.
- 24) Some Brassicaceae Extracts as Potential Antioxidants and Green Corrosion Inhibitors, Ienaşcu, Ioana Maria Carmen; Căta, Adina; Chis, Adriana Aurelia; Ştefănuţ, Mariana Nela; **Sfirloagă, Paula**; Rusu, Gerlinde; Frum, Adina; Arseniu, Anca Maria; Morgovan, Claudiu; Rus, Luca Liviu; Dobrea, Carmen Maximiliana, **2023**, Materials 16(8), 2967.
- 25) The in-depth study of Romanian prehistoric ceramics: Late Neolithic/Eneolithic pottery and clay materials from the Foeni Tell-Orthodox cemetery in Timiş county, Vlase, Dan; Vlase, Gabriela; Ursuţ, Gabriela; **Sfirloaga, Paula**; Manea, Florin; Budiul, Mihaela; Rotaru, Andrei; Vlase, Titus, Ceramics International, Volume 49, Issue 9, Pages 14941 - 149561 May **2023**.
- 26) Multimode Detection Platform Based on 3D Integrated Sensor for Fast On-Site Assay of Methylprednisolone in Its Pharmaceutical Formulation and Surface Water Samples, Stefan-Van Staden, Raluca-Ioana; Tuchi, Bianca-Maria; van Staden, Jacobus (Koos) Frederick; **Sfirloaga, Paula**, Journal of the Electrochemical Society, Volume 170, Issue 3 March **2023** Article number 037516.
- 27) 3D Stochastic Microsensors Based on Single-Walled Carbon Nanotubes Decorated with Gold Nanoparticles for Molecular Recognition and Determination of Heregulin-α and HER Family (HER1-4) in Biological Samples, Stefan-Van Staden, Raluca-Ioana; Cioates Negut, Catalina; **Sfirloaga, Paula**, Journal of the Electrochemical Society, Volume 170, Issue 3 March **2023** Article number 037503.

- 28) Simultaneous Molecular Recognition of Interleukins 2 and 4, and of Tumour Necrosis Factor- α in Biological Samples, Cioates Negut, Catalina; Stefan-van Staden, Raluca-Ioana; **Sfirloaga, Paula**, *Electroanalysis*, Volume 35, Issue 3 March **2023** Article number e202200305.
- 29) Magnetizable Membranes Based on Cotton Microfibers, Honey, Carbonyl Iron, and Silver Nanoparticles: Effects of Static Magnetic Fields and Medium-Frequency Electric Fields on Electrical Properties, Ioan Bica, Eugen Mircea Anitas, and **Paula Sfirloaga**, *Magnetochemistry* **2023**, 9, 19.
- 30) Gold Nanoparticles/Nanographene-Based 3D Sensors Integrated in Mini-Platforms for Thiamine Detection, Damaris-Cristina Gheorghe, Jacobus (Koos) Frederick van Staden, Raluca-Ioana Stefan-van Staden, and **Paula Sfirloaga**, *Sensors* **2023**, 23, 344.
- 31) Free-Base Porphyrin Aggregates Combined with Nickel Phosphite for Enhanced Alkaline Hydrogen Evolution, Bogdan-Ovidiu Taranu, Eugenia Fagadar-Cosma, **Paula Sfirloaga** and Maria Poienar, *Energies* **2023**, 16, 1212.
- 32) Investigation of Catalytic and Photocatalytic Degradation of Methyl Orange Using Doped LaMnO₃ Compounds, **Paula Sfirloaga**, Madalina-Gabriela Ivanovici, Maria Poienar, Catalin Ianasi and Paulina Vlazan, *Processes* **2022**, 10, 2688.
- 33) Electrochemical Investigation of the OER Activity for Nickel Phosphite-Based Compositions and Its Morphology-Dependent Fluorescence Properties, Maria Poienar, Paula Svera, Bogdan-Ovidiu Taranu, Catalin Ianasi, **Paula Sfirloaga**, Gabriel Buse, Philippe Veber, and Paulina Vlazan, *Crystals* **2022**, 12, 1803.
- 34) Ultrasensitive assay of HER1, HER2, and heregulin- α in whole blood, Stefan-van Staden, Raluca-Ioana; Musat, Oana-Raluca; Gheorghe, Damaris-Cristina; Ilie-Mihai, Ruxandra-Maria; Cioates Negut, Catalina; **Sfirloaga, Paula**, *Talanta Open*, Article number 100151, 2022.
- 35) Nanographene-based electrochemical sensors for ultrasensitive determination of sorbic acid from food, Stefan-van Staden, Raluca-Ioana; Niculae, Andreea-Roxana; van Staden, Jacobus Frederick; Georgescu State, Ramona; **Sfirloaga, Paula**, *Analytical and Bioanalytical Chemistry*, Volume 414, Issue 23, Pages 6813 - 6824 September 2022.
- 36) Novel Chloro-Substituted Salicylanilide Derivatives and Their β -Cyclodextrin Complexes: Synthesis, Characterization, and Antibacterial Activity, Ienaşcu, Ioana Maria Carmen, Cata Adina, Srefanut Mariana Nela, Popescu Iuliana, Rusu Gherlinde, **Sfirloaga Paula**, Ursu Daniel, Mosoarca Cristina, Dabici Anamaria, Danciu Corina, Muntean Delia, Pop Raluca, *Biomedicines*, Volume 10, Issue 7 July 2022 Article number 1740.

- 37) An Approach to the Simultaneous Determination of a Panel of Five Biomarkers for the Early Detection of Brain Cancer Using the Stochastic Method, Catalina Cioates Negut, Raluca-Ioana Stefan-van Staden, and **Paula Sfirloaga**, Chemistry 2022, 4, 1382–1394.
- 38) Simultaneous Molecular Recognition of Interleukins 2 and 4, and of Tumour Necrosis Factor- α in Biological Samples, Cioates Negut, C., Stefan-van Staden, R.-I., **Sfirloaga, P.**, Electroanalysis, 2022.
- 39) Sustainable removal of 17 α -ethynylestradiol from aqueous environment using rare earth doped lanthanum manganite nanomaterials, D. Sojic Merkulov, P. Vlazan, M. Poienar, S. Bognar', C. Ianasi, **P. Sfirloaga**, Catalysis Today 2022, DOI 10.1016/j.cattod.2022.05.011
- 40) Disclosing the thermal behaviour, electrochemical and optical properties of synthetic $\text{Fe}_3(\text{PO}_4)_2(\text{OH})_2$ materials, Maria Poienar, Bogdan-Ovidiu Taranu, Paula Svera, **Paula Sfirloaga**, Paulina Vlazan, Journal of Thermal Analysis and Calorimetry, Volume 147, Issue 21, Pages 11839 - 11855 November 2022.
- 41) Characteristics of late Neolithic pottery of the Zau culture: analysis of pottery samples from Iernut-Site II (Mures County, Romania), Dan Vlase, Titus Vlase, Mădălin Bunoiu, **Paula Sfirloagă**, Alexandra-Gabriela Ursuț, Gabriela Vlase, Journal of Thermal Analysis and Calorimetry, 147(9), pp. 5351-5363, 2022.
- 42) Comparative thermal and hyphenated analysis of diferent mortars samples from Deva region, Gabriela Vlase, Dan Vlase, Iosif Vasile Ferencz, **Paula Sfirloagă**, Dorel Micle, Florin Manea, Titus Vlase, Journal of Thermal Analysis and Calorimetry, 147(9), pp. 5365-5376, 2022.
- 43) Effects of electric and magnetic fields on dielectric and elastic properties of membranes composed of cotton fabric and carbonyl iron microparticles, Ioan Bica, Maria Bălășoiu, **Paula Sfirloaga**, Results in Physics 35 (2022) 105332.
- 44) Electric and Dielectric Properties in Low-Frequency Fields of Composites Consisting of Silicone Rubber and Al Particles for Flexible Electronic Devices, Alexandrina Teusdea, Iosif Malaescu, **Paula Sfirloaga** and Catalin Nicolae Marin, Materials 2022, 15, 2309.
- 45) Stochastic Microsensors Based on Carbon Nanotubes for Molecular Recognition of the Isocitrate Dehydrogenases 1 and 2, Raluca-Ioana Stefan-van Staden, Catalina Cioates Negut, Sorin Sebastian Gheorghe and **Paula Sfirloaga**, Nanomaterials 2022, 12, 460. doi.org/10.3390/nano12030460.
- 46) New functional hybrid materials based on clay minerals for enhanced electrocatalytic activity, Bogdan-Ovidiu Taranu, Paulina Vlazan, Paula Svera (m. Ianasi), Maria Poienar, **Paula Sfirloaga**, Journal of Alloys and Compounds 892 (2021) 162239.

- 47) Preliminary study for the preparation of transmucosal or transdermal patches with acyclovir and lidocaine, Marioane Cristina-Adela; Bunoiu Mădălin; Mateescu Mădălina; **Sfirloaga Paula**, Vlase, Gabriela; Vlase, Titus, *Polymers*, Vol 13, 20, 2021.
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