

## PERSONAL INFORMATION



Ildik Lung (born Bro )

 67-103 Donat St., 400293 Cluj-Napoca, Romania +40264-584037 ildiko.lung@itim-cj.ro Yahoo: ildikobros

Gender Femal | Date of birth 28/06/1977 | Nationality Romanian

## PLACE OF WORK

National Institute for Research and Development of Isotopic and Molecular Technologies

## WORK EXPERIENCE

2016 - present

**Scientific researcher III**

National Institute for Research and Development of Isotopic and Molecular Technologies, Cluj-Napoca, 67-103 Donat St., 400293 Cluj-Napoca, Romania

Bioactive compounds extraction from plants by classical and modern techniques; the optimization of extraction conditions using the Box-Behnken experimental model; the influence of stress factors on the bioactive compounds from plants; separation and determination of various compounds by HPLC, TLC and UV-Vis; water decontamination using different nanoparticle systems; synthesis of nanoparticles (eg. MnO<sub>2</sub>, Fe<sub>3</sub>O<sub>4</sub>/MnO<sub>2</sub>, MWCNT-COOH, MWCNT-Fe<sub>3</sub>O<sub>4</sub>, etc.), drawing the documents necessary for the project proposals.

**Business or sector** Research

2006 - 2016

**Scientific researcher**

National Institute for Research and Development of Isotopic and Molecular Technologies, Cluj-Napoca, 67-103 Donat St., 400293 Cluj-Napoca, Romania

Bioactive compounds extraction from plants by classical and modern techniques; the influence of abiotic stress induced by microwaves from different domains of GSM frequencies (mobile communications) and WLAN (wireless communications) on bioactive compounds in plants; separation and determination of various compounds by HPLC, TLC and UV-Vis; water decontamination using different nanoparticle systems; synthesis of nanoparticles (eg. MnO<sub>2</sub>, Fe<sub>3</sub>O<sub>4</sub>/MnO<sub>2</sub>, MWCNT-COOH, MWCNT-Fe<sub>3</sub>O<sub>4</sub>, etc.), drawing the documents necessary for the project proposals.

**Business or sector** Research

2004 - 2006

**Research assistant**

National Institute for Research and Development of Isotopic and Molecular Technologies, Cluj-Napoca, 67-103 Donat St., 400293 Cluj-Napoca, Romania

Unconventional processing techniques of the samples in microwave field; extraction of polyphenolic compounds from plants by classical and modern methods; analysis of polyphenolic compounds by thin layer chromatography (TLC) and UV-Vis spectrometry.

**Business or sector** Research

## EDUCATION AND TRAINING

2005 - 2012

**PhD in Chemistry**

8 EQF

Babes-Bolyai University, Faculty of Chemistry and Chemical Engineering

2003 - 2004

**Master degree – specialization in Modern methods of analysis used for quality control of the environment and products**

7 EQF

Babes-Bolyai University, Faculty of Chemistry and Chemical Engineering

1998 - 2003

**BSc in Chemical Engineering - specialization in Technology of organic substances**

6 EQF

Babes-Bolyai University, Faculty of Chemistry and Chemical Engineering

1992 - 1996 **Bacalaureate Diploma** **4 EQF**  
 "Onisifor Ghibu" Theoretical High School, Cluj-Napoca

#### PERSONAL SKILLS AND COMPETENCES

Mother tongues Romanian, Hungarian

Other languages	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	B2	B1	B1	B2

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user  
Common European Framework of Reference for Languages

Communication skills Communication skills, high responsibility, sociability, tolerance.

Organisational / managerial skills Adaptability and team work capacity. Good skills in preparing project required documentation.

#### Job-related skills

Courses:

- Specialization Auditor of the Quality Management System in an accredited/ accredited laboratory according to ISO 17025: 2005 and ISO 19011: 2011 (Brasov, 17 – 20 May 2016)
- Application Training for Shimadzu LCMS and LCMS Solution Software (Viena, 16 – 20.03.2009)
- Auditor's Specialization in the Field of Quality (Cluj-Napoca, 21 – 25 May 2007)
- Environmental Auditor Specialization (Cluj-Napoca, 28 May – 01 June 2007)
- Specialization Auditor Health and Occupational Safety (Cluj-Napoca, 28 May – 01 June 2007)

#### Digital skills

##### SELF-ASSESSMENT

Information processing	Communication	Content creation	Safety	Problem solving
INDEPENDENT USER	INDEPENDENT USER	INDEPENDENT USER	INDEPENDENT USER	BASIC USER

Levels: Basic user - Independent user - Proficient user  
Digital competences - Self-assessment grid

- Adobe Photoshop, Paint, Origin, Chemwin, Corel Draw, LC Solution, Wincats, Internet documentation

#### Other skills

- Scientific reviewer at:  
 Journal of planar chromatography – Mod. TLC  
 Ultrasonics Sonochemistry

#### ADDITIONAL INFORMATION

Publications	Published papers: 52 in ISI indexed journals, 17 in non-ISI journals, 4 in proceedings Chapters in English and Romanian, in books published in the country: 1
Conferences	Participation at conferences: 103 internationals and 10 nationals
Patents	1 patent in Romania - E. Surducan, V. Surducan, Soran M.L., <u>Bros I.</u> , "Instala ie de separare a compu ilor chimici prin chromatografie în prezen a câmpului de microunde de putere" Installation for separation of the chemical compounds by chromatography in the presence of the power microwave field RO 123363 / 28.10.2011 3 patents in the Republic of Moldova ( "Procedure for the Functional Cheese Cream", Ghendov-Mosanu A., Popescu L., Sturza R., <u>Lung I.</u> , Opris O., Soran L., MD 1290 Z 2019.06.30; "Procedure for making functional cheese dessert", Ghendov-Mosanu A., Popescu L., Sturza R., <u>Lung I.</u> , Opri O., Soran L., Stan M., MD 1289 Z 2019.06.30) and also applied in Romania; L. Popescu, A. Ghendov-Mo anu, R. Sturza, A. Patras, <u>I. Lung</u> , O.I.Opri , M.L. Soran, "Procedeu de fabricare a emulsiei cosmetice naturale cu factor de protecție solară" / Process for the manufacture of natural cosmetic emulsion with sun protection factor Cerere brevet A/00323 din 09.06.2020.
Citations	582 (according to ISI Web of Knowledge)
Projects	Member in research team of 20 de projects
Memberships	Member of the professional association: Romanian Society of Chemistry
Honours and awards	<b>Excellence Award</b> at the European Exhibition of Creativity and Innovation EUROINVENT 2022, 26 - 28 may 2022, Ia i, Romania, for „Process of making yogurt with high biological value”, authors: L. Popescu, A. Ghendov-Mo anu, R. Sturza, A. Patra , I. Lung, O.I. Oprи , M.L. Soran <b>Excellence Award and the gold medal</b> at the International Exhibition of Research, Innovation and Invention, „PRO INVENT 2021”, Edition XIX, Octomber 20-22, 2021, Cluj-Napoca, Romania, for: “Process of making yogurt with high biological value”, authors: L. Popescu, A. Ghendov-Mo anu, R. Sturza, A. Patras, I. Lung, O.I. Oprи , M.L. Soran <b>Excellence Award and the silver medal</b> at the International Exhibition of Research, Innovation and Invention, „PRO INVENT 2021”, Edition XIX, Octomber 20-22, 2021, Cluj-Napoca, Romania, for: “Process for manufacturing natural cosmetic emulsion with sun protection factor”, authors: M.L. Soran, I. Lung, O.I. Oprи , A.O. Stegarescu, R. Podea <b>Diploma of bronze medal</b> at 12 <sup>th</sup> edition of EUROINVENT-European Exhibition of Creativity and Innovation, ONLINE, May 23, 2020, Ia i, Romania, for: “Process for producing a functional curd cream”, authors: A. Ghendov-Mo anu, L. Popescu, R. Sturza, I. Lung, O.I. Oprи , M.L. Soran <b>Prize I</b> awarded at the Fair of Inventions and Innovations "Inovaliment 2020", First edition, November 23-27, 2020, Romania, for: “ Process of manufacturing functional cream cheese”, authors: A. Ghendov-Mo anu, L. Popescu, R. Sturza, I. Lung, O.I. Oprи , M.L. Soran <b>Gold medal awarded at</b> the International Exhibition of Research, Innovation and Invention „Prolinvent-2020”, Edition XVIII, , November 18-20, 2020, Cluj-Napoca, Romania, for: “Process for producing a functional curd dessert”, authors: L. Popescu, A. Ghendov-Mo anu, R. Sturza, I. Lung, O.I. Oprи , M.L. Soran <b>Diploma of bronze medal</b> at 11 <sup>th</sup> edition of EUROINVENT-European Exhibition of Creativity and Innovation, May 16-18, 2019, Ia i, Romania, for: “Process for producing a functional curd dessert”, authors: A. Ghendov-Mo anu, L. Popescu, R. Sturza, I. Lung, O.I. Oprи , M.C. Stan, M.L. Soran <b>Innovation Award</b> from “Carol Davila” University of Medicine and Pharmacy Bucharest, in recognition of the outstanding contribution to the 11th edition of EUROINVENT-European Exhibition of Creativity and Innovation, May 16-18, 2019, Ia i, Romania, for: “Process for producing a functional curd dessert”, authors: A. Ghendov-Mo anu, L. Popescu, R. Sturza, I. Lung, O.I. Oprи , M.C. Stan, M.L. Soran <b>Best presentation award</b> at XIII. International Conference on Agricultural, Biotechnology, Biological and Biosystems Engineering ICABBEE, October 21-22, 2019, Athens, Greece, for: “The Influence of Ibuprofen, Diclofenac and Naproxen on Composition and Ultrastructural Characteristics of Atriplex patula and Spinacia oleracea”, authors: O. Oprи , I. Lung, M.L. Soran, A. Ciorfi та, L. Copolovici <b>Excellence Award and the gold medal</b> at the International Exhibition of Research, Innovation and Invention, PRO INVENT, 21-23 March 2018, Cluj-Napoca, Romania, for: “The process for obtaining polyphenols from grape marc”, authors: R. Sturza, A. Ghendov-Mo anu, E. Cristea, A. Patra , I. Lung, O.I. Oprи , M.C. Stan, M.L. Soran <b>Excellence Award and the gold medal</b> at The 22 <sup>nd</sup> International Exhibition of Inventics, INVENTICA 2018, June 27-29, Ia i, Romania, for: “Process for obtaining polyphenols from grape marc”, authors: R. Sturza, A. Ghendov-Mo anu, E. Cristea, A. Patra , V. Popovici, <u>I. Lung</u> , O.I. Oprи , M.C. Stan, M.L. Soran <b>Excellence Award and the silver medal and Excellence Award and the Proinvent medal</b> at the International Exhibition of Research, Innovation and Invention, Proinvent seventh edition, Cluj-Napoca, 2009, for "group of inventions", consisting of: - “Method and installation for processing dynamics of a substance in power microwave field” authors: E. Surducan, V.Surducan Patent: RO 122063 B1 /28.11.2008

- "Stimulating the development of plants in the microwave field" authors: E.Surducan, V. Surducan, A. Halmagyi Patent application: A00429/ 09.06.2008

- "Instalatie de separare a compusilor chimici prin cromatografie in prezenta campului de microunde de putere" authors: E. Surducan, V.Surducan, M.L. Soran, I. Bros Patent: RO-A/00833 – 06.12.2007

**Special Award of Scientific Research Authority, Award II, A11 Section – Basic Sciences,**

"Microwave interaction with molecular and biomolecular systems", authors: E. Surducan, V. Surducan, V. Tosa, I. Bros, M.L. Soran

Date: 16.01.2023

Lung Ildikó



## Publication lists

Papers published in ISI journals:

1. M.L. Soran, A.N. Sîrb, I. Lung, O. Opri , O. Culicov, A. Stegarescu, P. Nekhoroshkov, D.M. Gligor. A multi-method approach for impact assessment of some heavy metals on *Lactuca sativa* L. *Molecules*, 2023, 28, 759.
2. **I. Lung**, M.L. Soran, A. Stegarescu, O. Opri . Application of CNT-COOH/MnO<sub>2</sub>/Fe<sub>3</sub>O<sub>4</sub> nanocomposite for the removal of cymoxanil from aqueous solution: isotherm and kinetic studies. *Analytical Letters*, 2023, 56(2), 216-230.
3. **I. Lung**, A. Stegarescu, O. Opri , M.L. Soran. Testing MWCNT-COOH/Fe<sub>3</sub>O<sub>4</sub> nanocomposite for the removal of ampicillin from synthetic aqueous solutions. *STUDIA UBB CHEMIA*, LXVII, 4, 2022, 141-149.
4. A. Stegarescu, **I. Lung**, A. Ciorăță, I. Kacso, O. Opriș, M.L. Soran, A. Soran. The antibacterial properties of nanocomposites based on carbon nanotubes and metal oxides functionalized with azithromycin and ciprofloxacin. *Nanomaterials*, 2022, 12, 4115.
5. A. Stegarescu, H. Cabrera, H. Budasheva, M.L. Soran, **I. Lung**, F. Limosani, D. Korte, M. Amati, G. Borodi, I. Kacso, O. Opri , M. Dan, S. Bellucci. Synthesis and characterization of MWCNT-COOH/Fe<sub>3</sub>O<sub>4</sub> and CNT-COOH/Fe<sub>3</sub>O<sub>4</sub>/NiO nanocomposites: Assessment of adsorption and photocatalytic performance. *Nanomaterials*, 2022, 12, 3008.
6. O. Culicov, A. Stegarescu, M.L. Soran, **I. Lung**, O. Opriș, A. Ciorăță, P. Nekhoroshkov. The effect of copper salts on bioactive compounds and ultrastructure of wheat plants. *Molecules*, 2022, 27, 4835.
7. O. Opri , **I. Lung**, M.L. Soran, A. Stegarescu, T. Cesco, A. Ghendov-Mosanu, P. Podea, R. Sturza. Efficient extraction of total polyphenols from apple and investigation of its SPF properties. *Molecules*, 2022, 27, 1679.
8. A. Ghendov-Mosanu, D. Cojocari, G. Balan, A. Patras, **I. Lung**, M.L. Soran, O. Opri , E. Cristea, R. Sturza. Chemometric optimization of biologically active compounds extraction from grape marc: Composition and antimicrobial activity. *Molecules*, 2022, 27, 1610.
9. **I. Lung**, M.L. Soran, A. Stegarescu, O. Opri . Devrinol and triadimefon removal from aqueous solutions using CNT-COOH/MnO<sub>2</sub>/Fe<sub>3</sub>O<sub>4</sub> nanocomposite. *Journal of the Iranian Chemical Society*, 2022, 19(5), 2031-2039.
10. M.L. Soran, **I. Lung**, O. Opri , O. Culicov, A. Ciorăță, A. Stegarescu, I. Zinicovscaia, N. Yushin, K. Vergel, I. Kacso, G. Borodi. The effect of TiO<sub>2</sub> nanoparticles on the composition and ultrastructure of wheat. *Nanomaterials*, 2021, 11(12), 3413.
11. A. Macari, R. Sturza, **I. Lung**, M.L. Soran, O. Opri , G. Balan, A. Ghendov-Mosanu, D.C. Vodnar, D. Cojocari. Antimicrobial effects of basil, summer savory and tarragon lyophilized extracts in cold storage sausages. *Molecules*, 2021, 26(21), 6678.
12. **I. Lung**, O. Opris, M.L. Soran, O. Culicov, A. Ciorăță, A. Stegarescu, I. Zinicovscaia, N. Yushin, K. Vergel, I. Kacso, G. Borodi, M. Pârvu. The Impact Assessment of CuO Nanoparticles on the Composition and Ultrastructure of *Triticum aestivum* L. *International Journal of Environmental Research and Public Health*, 2021, 18, 6739.
13. O. Opris, M.L. Soran, **I. Lung**, A. Ciorăță, L. Copolovici. Biotransformation of non-steroidal anti-inflammatory drugs induces ultrastructural modifications in green leafy vegetables. *Journal of Soil Science and Plant Nutrition*, 2021, 21, 1408-1420.
14. A. Stegarescu, M.L. Soran, **I. Lung**, O. Opris, S. Gutoiu, C. Leostean, M.D. Lazar, I. Kacso, T.D. Silipas, O. Pana, A.S. Porav. Nanocomposite based on Fe<sub>3</sub>O<sub>4</sub>/MnO<sub>2</sub> for biodiesel production improving. *Chemical Papers*, 2021, 75, 3513-3520.
15. O. Opris, M.L. Soran, **I. Lung**, A. Stegarescu, S. Gutoiu, R. Podea, P. Podea. Optimization of extraction conditions of polyphenols, antioxidant capacity and sun protection factor from Prunus spinose fruits: application in sunscreen formulation. *Journal of the Iranian Chemical Society*, 2021, 18, 2625-2636.
16. **I. Lung**, M.L. Soran, A. Stegarescu, O. Opri , S. Gutoiu, C. Leo tean, M.D. Laz r, I. Kacso, T.D. Silipas, A.S. Porav. Evaluation of CNT-COOH/MnO<sub>2</sub>/Fe<sub>3</sub>O<sub>4</sub> nanocomposite for ibuprofen and paracetamol removal from aqueous solutions. *Journal of hazardous materials*, 2021, 403, 123528.
17. A. Stegarescu, S. Gutoiu, **I. Lung**, O. Opris, C. Leo tean, O. Pan , L. Barbu, M.L. Soran. Synthesis and characterization of Fe@FePt@SiO<sub>2</sub>@NH<sub>2</sub> nanoplatform for amino acids recognition. *Journal of Nanoparticle Research*, 2021, 23, 91.
18. O. Opri , **I. Lung**, M.L. Soran, A. Ciorăță, L. Copolovici. Investigating the effects of non-steroidal anti-inflammatory drugs (NSAIDs) on the composition and ultrastructure of green leafy vegetables with important nutritional values. *Plant Physiology and Biochemistry*, 2020, 151, 342-351.
19. A. Ciorăță, M. Suciu, S. Macavei, I. Kacso, **I. Lung**, M.L. Soran, M. Pârvu. Green synthesis of Ag-MnO<sub>2</sub> nanoparticles using *Chelidonium majus* and *Vinca minor* extracts and their *in vitro* cytotoxicity. *Molecules*, 2020, 25, 819.
20. X. Filip, F. Martin, M. Pop, I. Kacso, I. Grosu, M. Miclaus, D. Vodnar, **I. Lung**, G. Filip, E.D. Olteanu, R. Moldovan, A. Nagy, I. Baldea. Ketoconazole - p-aminobenzoic acid cocrystal: revival of an old drug by crystal engineering. *Molecular Pharmaceutics*, 2020, 17, 919-932.
21. A. Ghendov-Mo anu, R. Sturza, O. Opri , **I. Lung**, L. Popescu, V. Popovici, M.L. Soran, A. Patra . Effect of lipophilic sea buckthorn extract on cream cheese properties. *Journal of Food Science and Technology*, 2020, 57(2), 628-637.
22. A. Stegarescu, **I. Lung**, C. Leo tean, I. Kacso, O. Opri , M.D. Laz r, L. Copolovici, S. Gutoiu, M. Stan, A. Popa, O. Pană, A.S. Porav, M.L. Soran. Green synthesis, characterization and test of MnO<sub>2</sub> nanoparticles as catalyst in biofuel production from grape residue and seeds oil. *Waste and Biomass Valorization*, 2020, 11, 5003-5013
23. O. Opri , A. Ciorăță, M.L. Soran, **I. Lung**, D. Copolovici, L. Copolovici. Evaluation of the photosynthetic parameters, emission of volatile organic compounds and ultrastructure of common green leafy vegetables after exposure to non-steroidal anti-inflammatory drugs (NSAIDs). *Ecotoxicology*, 2019, 28, 631–642.
24. T. Constantinescu, C.N. Lungu, **I. Lung**. Lipophilicity as a central component of drug-like properties of chalcones and flavonoid derivatives. *Molecules*, 2019, 24, 1505.
25. M. Stan, **I. Lung**, M.L. Soran, O. Opri , C. Leo tean, A. Popa, F. Copaciu, M.D. Laz r, I. Kacso, T.D. Silipas, A.S. Porav. Starch-coated green synthesized magnetite nanoparticles for removal of textile dye Optilan Blue from aqueous media. *Journal of the Taiwan Institute of Chemical Engineers*, 2019, 100, 65-73.

26. C. Voica, **I. Lung**, M.D. Lazar, A.D. Magdas. Removal of metals from water using platinum nanostructured carbon composites. *Analytical letters*, 2019, 52(1), 201-212.
27. **I. Lung**, M.L. Soran, M. Stan, O. Opris, F. Copaciu, M. Stefan, M.D. Lazar, C. Leostean, A.S. Porav. Green synthesized Fe<sub>3</sub>O<sub>4</sub> nanoparticles for Lanasyne Red azo dye removal from aqueous solutions. *Revue Roumaine de Chimie*, 2018, 63(10), 965-970.
28. **I. Lung**, M.L. Soran, O. Opris, M. Stan, C. Bele. Microwave irradiation effect on polyphenol content and antioxidant activity of basil. *Studia UBB Chemia, LXIII*, 2018, 3, 87-94.
29. O. Vostinaru, E. Dinte, M.L. Soran, **I. Lung**, O. Opris, C. Mogosan. Evaluation of the anti-gout potential of *Calluna vulgaris* L. (Ericaceae) in rats. *Records of Natural Products*, 2018, 12(5), 432-444.
30. **I. Lung**, M. Stan, O. Opris, M.L. Soran, M. Senila, M. Stefan. Removal of lead(II), cadmium(II), and arsenic(III) from aqueous solution using magnetite nanoparticles prepared by green synthesis with Box-Behnken design. *Analytical letters*, 2018, 51, 2517-2529.
31. E. Szekeres, C.M. Chiriac, A. Baricz, T. Szoke-Nagy, **I. Lung**, M.L. Soran, K. Rudi, N. Dragos, C. Coman. Investigating antibiotics, antibiotic resistance genes, and microbial contaminants in groundwater in relation to the proximity of urban areas. *Environmental Pollution*, 2018, 236, 734-744.
32. D. Casoni, M. Badea, **I. Bros**, S.C.A. Cobzac. Investigation on image processing parameters for plate evaluation in TLC analysis of mycotoxins. *Studia Universitatis Babes-Bolyai Chemia*, 2017, 62(3), 89-102.
33. M.L. Soran, O. Opris, **I. Lung**, I. Kacso, A.S. Porav, M. Stan. The efficiency of the multi-walled carbon nanotubes used for antibiotics removal from wastewaters generated by animal farms. *Environmental Science and Pollution Research*, 2017, 24(19), 16396-16406.
34. M. Stan, **I. Lung**, M.L. Soran, C. Leostean, A. Popa, M. Stefan, M.D. Lazar, O. Opris, T.D. Silipas, A.S. Porav. Removal of antibiotics from aqueous solutions by green synthesized magnetite nanoparticles with selected agro-waste extracts. *Process Safety and Environmental Protection*, 2017, 107, 357-372.
35. M.L. Soran, **I. Lung**, O. Opris, V. Floare-Avram, C. Coman. Determination of antibiotics in surface water by solid-phase extraction and high-performance liquid chromatography with diode array and mass spectrometry detection. *Analytical letters*, 2017, 50(7), 1209-1218.
36. O. Opris, M.L. Soran, **I. Lung**, M.R.C. Trusca, T. Szoke-Nagy, C. Coman. The optimization of the antibiotics extraction from wastewaters and manure using Box-Behnken experimental design. *International Journal of Environmental Science and Technology*, 2017, 14(3), 473-480.
37. R. Puscas, D.A. Magdas, **I. Lung**, G. Cristea, M.L. Soran, I. Feher, A. Dehelean. Isotopic composition influence of irrigation water on some aromatic plants. *Studia UBB Chemia*, 2016, LXI, 4, 31-42.
38. **I. Lung**, M.L. Soran, O. Opris, M.R.C. Trusca, Ü. Niinemets, L. Copolovici. Induction of stress volatiles and changes in essential oils content and composition upon microwave exposure in the *Ocimum basilicum* aromatic plant. *Science of the Total Environment*, 2016, 569-570, 489-495.
39. A. Dehelean, D.A. Magdas, R. Puscas, **I. Lung**, M. Stan. Quality assessment of some commercial Romanian juices. *Romanian Reports in Physics*, 2016, 68, 746-759.
40. M. Stan, A. Popa, D. Toloman, A. Dehelean, **I. Lung**, G. Katona. Enhanced photocatalytic degradation properties of zinc oxide nanoparticles synthesized by using plant extracts. *Materials Science in Semiconductor Processing*, 2015, 39, 23-29.
41. **I. Lung**, M. Stan, O. Opris, M.L. Soran. Determination of myristicin and linalool in plants exposed to microwave radiation by high-performance liquid chromatography. *Analytical letters*, 2015, 48, 1-8.
42. M. Stan, M.L. Soran, C. Varodi, **I. Lung**. Influence of microwave field on the ascorbic acid content in leaves of some common aromatic plants in Romania. *Studia Universitatis Babes-Bolyai, Chemia*, 2014, LIX, 1, 125-133.
43. M. Stan, O. Opris, **I. Lung**, M.L. Soran. High-performance thin-layer chromatographic quantification of myristicin and linalool from leaf extracts of microwave-irradiated parsley, dill and celery. *Journal of planar chromatography – Mod. TLC*, 2014, 27(2), 97-101.
44. M. Stan, **I. Lung**, O. Opris, M.L. Soran. High-performance thin-layer chromatographic quantification of some essential oils from *Anethum graveolens* extracts. *Journal of planar chromatography – Mod. TLC*, 2014, 27(1), 33-37.
45. M. Stan, M.L. Soran, C. Varodi, **I. Lung**, L. Copolovici, C. Mruoiu. Extraction and GC determination of volatile aroma compounds from extracts of three plant species of the *Apiaceae* family. *AIP Conference Proceedings*, 2013, 1565, 75-78.
46. **I. Lung**, M.L. Soran, C. Tudoran, C. Mruoiu. Effect of microwave irradiation on polyphenolic compounds from *Satureja hortensis* L. *Central European Journal of Chemistry*, 2013, 11(4), 535-541.
47. M. Stan, M.L. Soran, C. Varodi, **I. Lung**. Extraction and identification of flavonoids from parsley extracts by HPLC analysis. *AIP Conference Proceedings*, 2012, 1425, 50-52.
48. M.L. Soran, C. Varodi, S.C. Cobzac, **I. Lung**. Essentials oils determination from *Satureja hortensis* L. by chromatographic techniques. *Journal of Essential Oil – Bearing Plants*, 2011, 14(6), 699-707.
49. M.L. Soran, **I. Lung**. HPTLC analysis of thymol in extracts of *Satureja hortensis* L. obtained by different techniques. *Journal of Planar Chromatography – Mod. TLC*, 2010, 23(5), 320-322.
50. M. L. Soran, S. C. Cobzac, C. Varodi, **I. Lung**, E. Surducan, V. Surducan. Extraction and chromatographic determination of essentials oils from *Ocimum basilicum* L. leaves. *Studia Universitatis "Babes-Bolyai", Chemia*, 2010, LV(3), 31-38.
51. **I. Bros**, M.L. Soran, R.D. Briciu, S.C. Cobzac. HPTLC quantification of some flavonoids in extracts of *Satureja hortensis* L. obtained by use of different techniques. *Journal of Planar Chromatography – Mod. TLC*, 2009, 22(1), 25-28.
52. M.L. Soran, **I. Bros**, E. Surducan, V. Surducan. Microwave assisted thin-layer chromatography - an improved separation technique. *J. Planar Chromatogr.-Mod. TLC*, 2008, 21(4), 243-248.

**Papers published in non-ISI journals:**

1. A. Ciorășă, R. Gutt, I. Lung, M.L. Soran, M. Pârvu. Green-synthesized Ag-MnO<sub>2</sub> nanoparticles as plausible non-invasive antimicrobial treatment of cultural heritage. *GeoPatterns*, 2021, 6, 6-10.

2. M. Toma , O. Vostinaru, L. Soran, I. Lung, O. Opris, A. Toiu, A. Gavan, E. Dinte, C. Mogosan. Antihyperuricemic, anti-Inflammatory and antihypertensive effect of a dry extract from *Solidago virgaurea* L. (*Asteraceae*). *Scientia Pharmaceutica*, 2021, 89, 27.
3. O. Opris, I. Lung, M.L. Soran, R. Sturza, A. Ghendov-Mosanu. Fondant candies enriched with antioxidants from aronia berries and grape marc. *Revista de Chimie*, 2020, 71(2), 74-79.
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