


INFORMAȚII PERSONALE


Ildik Lung (născută Bro)

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Sexul Feminin | **Data nașterii** 28/06/1977 | **Naționalitatea** Română

LOCUL DE MUNCĂ

Institutul Național de Cercetare-Dezvoltare pentru Tehnologii Izotopice și Moleculare

EXPERIENȚA PROFESIONALĂ

2016 - prezent

Cercetător științific III

Institutul Național de Cercetare-Dezvoltare pentru Tehnologii Izotopice și Moleculare, Str. Donat, Nr. 67-103, 400293, Cluj-Napoca

Extracția compușilor bioactivi din plante prin metode clasice și moderne; utilizarea modelului experimental Box-Behnken la optimizarea condițiilor de extracție; influența factorilor de stres asupra compușilor bioactivi din plante; separarea și determinarea diferiților compuși prin HPLC, TLC și UV-Vis; depoluarea apelor utilizând diferite sisteme de nanoparticule; sinteza de nanoparticule (de exemplu: MnO_2 , Fe_3O_4/MnO_2 , MWCNT-COOH, MWCNT- Fe_3O_4 , etc), întocmirea documentelor necesare propunerilor de proiecte.

Tipul activității: cercetare

2006 - 2016

Cercetător științific

Institutul Național de Cercetare-Dezvoltare pentru Tehnologii Izotopice și Moleculare, Str. Donat, Nr. 67-103, 400293, Cluj-Napoca

Extracția compușilor bioactivi din plante prin metode clasice și moderne; influența stresului abiotic indus de microundele din domeniul diferitelor frecvențe GSM (comunicații mobile) și WLAN (comunicații wireless) asupra compușilor bioactivi din plante; separarea și determinarea diferiților compuși prin cromatografie de lichide de înaltă performanță (HPLC), cromatografie pe strat subțire (TLC) și spectrometrie UV-Vis; depoluarea apelor utilizând diferite sisteme de nanoparticule (de exemplu: MnO_2 , Fe_3O_4/MnO_2 , MWCNT-COOH, MWCNT- Fe_3O_4 , etc), întocmirea documentelor necesare propunerilor de proiecte.

Tipul activității: cercetare

2004 - 2006

Asistent cercetare

Institutul Național de Cercetare-Dezvoltare pentru Tehnologii Izotopice și Moleculare, Str. Donat, Nr. 67-103, 400293, Cluj-Napoca

Metode neconvenționale de procesare a substanței în câmp de microunde; extracția compușilor polifenolici din plante prin metode clasice și moderne; analiza compușilor polifenolici prin cromatografie pe strat subțire (TLC) și spectrometrie UV-Vis.

Tipul activității: cercetare

EDUCAȚIE ÎN FORMARE

2005 - 2012

Diplomă de Doctor în Chimie

Universitatea Babe-Bolyai Cluj-Napoca, Facultatea de Chimie și Inginerie Chimică

8 EQF

2003 - 2004

Diplomă de studii aprofundate – Specializarea Metode Moderne pentru Controlul Calității și Evaluarea Mediului

Universitatea Babe-Bolyai Cluj-Napoca, Facultatea de Chimie și Inginerie Chimică

7 EQF

- 1998 - 2003 **Diplom de licență – Specializarea Tehnologia Substanțelor Organice** 6 EQF
 Universitatea Babe-Bolyai Cluj-Napoca, Facultatea de Chimie și Inginerie Chimică
- 1992 - 1996 **Diplom de bacalaureat** 4 EQF
 Liceul teoretic "Onisifor Ghibu", Cluj-Napoca

COMPETENȚE PERSONALE

Limba maternă Română, Maghiară

Alte limbi străine cunoscute

Engleză

ÎN ELEGERE		VORBIRE		SCRIERE
Ascultare	Citire	Participare la conversație	Discurs oral	
B2	B2	B1	B1	B2

Niveluri: A1/A2: Utilizator elementar - B1/B2: Utilizator independent - C1/C2: Utilizator experimentat
[Cadru european comun de referință pentru limbi străine](#)

Competențe de comunicare

Abilități de comunicare, responsabil, sociabil, tolerant.

Competențe organizatorice/manageriale

Adaptabilitate și capacitate de lucru în echipă. Bune abilități în documentarea necesară pregătirii proiectelor.

Competențe dobândite la locul de muncă

Cursuri:

- Specializare Auditor al Sistemului de Management al Calității într-un laborator acreditat/în proces de acreditare conform standardelor ISO 17025:2005 și ISO 19011:2011 (Brașov, 17 – 20.05.2016)
- Application Training for Shimadzu LCMS and LCMS Solution Software (Viena, 16 – 20.03.2009)
- Specializare Auditor în Domeniul Calității (Cluj-Napoca, 21 – 25.05.2007)
- Specializare Auditor de Mediu (Cluj-Napoca, 28.05 – 01.06.2007)
- Specializare Auditor Sănătate și Securitate Ocupațională (Cluj-Napoca, 28.05 – 01.06.2007)

Competențe digitale

AUTOEVALUARE

Procesarea informației	Comunicare	Creare de conținut	Securitate	Rezolvarea de probleme
UTILIZATOR INDEPENDENT	UTILIZATOR INDEPENDENT	UTILIZATOR INDEPENDENT	UTILIZATOR INDEPENDENT	UTILIZATOR ELEMENTAR

Niveluri: Utilizator elementar - Utilizator independent - Utilizator experimentat
[Competențele digitale - Grilă de auto-evaluare](#)

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

Alte competențe

- Referent la:
 Journal of planar chromatography – Mod. TLC
 Ultrasonics Sonochemistry

INFORMAȚII SUPLIMENTARE

Publicații	Articole publicate: 52 în jurnale indexate ISI, 17 în jurnale neindexate ISI, 4 în proceedings Capitole în engleză și în română, în cărți publicate în țară: 1
Conferințe	Participare la conferințe: 103 internaționale și 10 naționale
Patente	1 patent în România - E. Surducan, V. Surducan, Soran M.L., Bros I. , "Instalație de separare a compușilor chimici prin cromatografie în prezența 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 patente în Republica Moldova ("Procedure for the Functional Cheese Cream", Ghendov-Mosanu A., Popescu L., Sturza R., Lung I. , Opris O., Soran L., MD 1290 Z 2019.06.30; "Procedure for making functional cheese dessert", Ghendov-Mosanu A., Popescu L., Sturza R., Lung I. , Opris O., Soran L., Stan M., MD 1289 Z 2019.06.30) aplicate în România; L. Popescu, A. Ghendov-Mosanu, R. Sturza, A. Patras, I. Lung , O.I Opris , M.L. Soran, "Procedeu de fabricare a brișurilor iaurtului cu valoare biologică înaltă", MD 1497/2020.06.18 (AGEPI). 1 cerere de brevet: M.L. Soran, I. Lung , O.I. Opris , A.O. Stegarescu, R. Podea "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.
Citari	582 (conform ISI Web of Knowledge)
Proiecte	Membru în echipa de cercetare a 20 proiecte
Afilieri	Membru în asociația profesională: Societatea Română de Chimie
Distincții	Diplom de Excelență acordat la Expoziția Europeană de Creativitate și Inovație EUROINVENT 2022, desfășurat în perioada 26 - 28 mai 2022, la Iași, România, pentru „Procedeu de fabricare a brișurilor iaurtului cu valoare biologică înaltă”, autori: L. Popescu, A. Ghendov-Mosanu, R. Sturza, A. Patras, I. Lung, O.I. Opris , M.L. Soran Diplom de Excelență și Medalie de aur acordat la Salonul Internațional al Cercetării Științifice, Inovații și Inventicii „ProInvent 2021”, Ediția XIX, organizat online, în perioada 20-22 octombrie, de Universitatea Tehnică din Cluj-Napoca, România, pentru „Procedeu de fabricare a brișurilor iaurtului cu valoare biologică înaltă”, autori: L. Popescu, A. Ghendov-Mosanu, R. Sturza, A. Patras, I. Lung, O.I. Opris , M.L. Soran Diplom de Excelență și Medalie de Argint acordat la Salonul Internațional al Cercetării Științifice, Inovații și Inventicii „ProInvent 2021”, Ediția XIX, organizat online, în perioada 20-22 octombrie, de Universitatea Tehnică din Cluj-Napoca, România, pentru „Procedeu de fabricare a emulsiei cosmetice naturale cu factor de protecție solară”, autori: M.L. Soran, I. Lung, O.I. Opris , A.O. Stegarescu, R. Podea Diploma de medalie de bronz la a 12 th ediție al EUROINVENT-European Exhibition of Creativity and Innovation, ONLINE, 23 Mai, 2020, la Iași, Romania, pentru: “Process for producing a functional curd cream”, autori: A. Ghendov-Mosanu, L. Popescu, R. Sturza, I. Lung, O.I. Opris , M.L. Soran Premiul I acordat la Târg de Invenții și Inovații ”Inovaliment 2020”, Prima ediție, desfășurat în perioada 23-27 noiembrie, 2020, România, pentru: “Procedeu de fabricare a brișurilor cremiei de brânză funcționale”, autori: A. Ghendov-Mosanu, L. Popescu, R. Sturza, I. Lung, O.I. Opris , M.L. Soran Medalia de aur acordat la Salonul Internațional al Cercetării Științifice, Inovații și Inventicii „ProInvent-2020”, Ediția XVIII, organizat online, în perioada 18-20 noiembrie, de Universitatea Tehnică din Cluj-Napoca, România, pentru “Procedeu de fabricare a brișurilor desertului de brânză funcțional”, autori: L. Popescu, A. Ghendov-Mosanu, R. Sturza, I. Lung, O.I. Opris , M.L. Soran Diploma de medalie de bronz la a XI-a ediția a EUROINVENT-European Exhibition of Creativity and Innovation, 16-18 Mai, 2019, la Iași, Romania, for: “Process for producing a functional curd dessert”, autori: A. Ghendov-Mosanu, L. Popescu, R. Sturza, I. Lung, O.I. Opris , M.C. Stan, M.L. Soran Premiul pentru inovație de la Universitatea de Medicină și Farmacie „Carol Davila” București, ca recunoaștere a contribuției remarcabile la a XI-a ediția a EUROINVENT-European Exhibition of Creativity and Innovation, 16-18 Mai, 2019, la Iași, Romania, pentru: “Process for producing a functional curd dessert”, authors: A. Ghendov-Mosanu, L. Popescu, R. Sturza, I. Lung, O.I. Opris , M.C. Stan, M.L. Soran Premiul pentru cea mai bună prezentare la XIII. Conferința internațională de inginerie agricolă, biotehnologică, biologică și a biosistemelor ICABBBE, 21-22 octombrie 2019, Atena, Grecia, pentru: “The Influence of Ibuprofen, Diclofenac and Naproxen on Composition and Ultrastructural Characteristics of Atriplex patula and Spinacia oleracea”, authors: O. Opris , I. Lung, M.L. Soran, A. Ciorăță, L. Copolovici Diplom de excelență și Medalia de aur la Salonul Internațional al Cercetării, Inovații și Inventicii, PRO INVENT, 21-23 martie 2018, Cluj-Napoca, România, pentru lucrarea: “Procedeu de obținere a polifenolilor din tescovină de struguri”, autori: R. Sturza, A. Ghendov-Mosanu, E. Cristea, A. Patras , I. Lung, O.I. Opris , M.C. Stan, M.L. Soran, V. Popovici Diplom de excelență și Medalia de aur la The 22 nd International Exhibition of Inventions, INVENTICA 2018, 27-29 iunie, la Iași, România, pentru lucrarea: “Process for obtaining polyphenols from grape marc”, autori: R. Sturza, A. Ghendov-Mosanu, E. Cristea, A. Patras , V. Popovici, I. Lung , O.I. Opris , M.C. Stan, M.L. Soran

Premiul de excelență, medalia de argint și premiul de excelență și medalia PROINVENT la Expoziția Internațională de Cercetare, Inovare și Invenție, PROINVENT a șaptea ediție, Cluj-Napoca, 2009, pentru "grup de invenții", constând în:

- "Method and installation for processing dynamics of a substance in power microwave field" autori: E. Surducan, V. Surducan Patent: RO 122063 B1 /28.11.2008

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

- "Instalație de separare a compușilor chimici prin cromatografie în prezența câmpului de microunde de putere" autori: E. Surducan, V. Surducan, M.L. Soran, I. Bro Patent: RO-A/00833 -06.12.2007

Premiul Special al Autorității de Cercetare științifică, Premiul II, A11 Secțiunea - tiințele de bază, "Microwave interaction with molecular and biomolecular systems", autori: E. Surducan, V. Surducan, V. Tosa, I. Bro, M.L. Soran

Data: 16.01.2023

Lung Ildikó



Lista de lucrări

Lucrări publicate în reviste cotate ISI:

1. M.L. Soran, A.N. Sirb, 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/MnO₂/Fe₃O₄ 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/Fe₃O₄ nanocomposite for the removal of ampicillin from synthetic aqueous solutions. *STUDIA UBB CHEMIA*, LXVII, 4, 2022, 141-149.
4. A. Stegarescu, I. Lung, A. Ciorîță, 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/Fe₃O₄ and CNT-COOH/Fe₃O₄/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. Ciorîță, 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/MnO₂/Fe₃O₄ nanocomposite. *Journal of the Iranian Chemical Society*, 2022, 19(5), 2031-2039.
10. M.L. Soran, I. Lung, O. Opri, O. Culicov, A. Ciorîță, A. Stegarescu, I. Zinicovscaia, N. Yushin, K. Vergel, I. Kacso, G. Borodi. The effect of TiO₂ 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. Opriș, M.L. Soran, O. Culicov, A. Ciorîță, 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. Opriș, M.L. Soran, I. Lung, A. Ciorîță, 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. Opriș, S. Gutoiu, C. Leostean, M.D. Lazar, I. Kacso, T.D. Silipas, O. Pana, A.S. Porav. Nanocomposite based on Fe₃O₄/MnO₂ for biodiesel production improving. *Chemical Papers*, 2021, 75, 3513-3520.
15. O. Opriș, 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/MnO₂/Fe₃O₄ nanocomposite for ibuprofen and paracetamol removal from aqueous solutions. *Journal of hazardous materials*, 2021, 403, 123528.
17. A. Stegarescu, S. Guțoiu, I. Lung, O. Opriș, C. Leo tean, O. Pan, L. Barbu, M.L. Soran. Synthesis and characterization of Fe@FePt@SiO₂@NH₂ nanoplatfor for amino acids recognition. *Journal of Nanoparticle Research*, 2021, 23, 91.
18. O. Opri, I. Lung, M.L. Soran, A. Ciorîță, 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. Ciorîță, M. Suci, S. Macavei, I. Kacso, I. Lung, M.L. Soran, M. Pârvu. Green synthesis of Ag-MnO₂ 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-Mosanu, R. Sturza, O. Opri, I. Lung, L. Popescu, V. Popovici, M.L. Soran, A. Patras. 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. Lazar, L. Copolovici, S. Guțoiu, M. Stan, A. Popa, O. Pană, A.S. Porav, M.L. Soran. Green synthesis, characterization and test of MnO₂ nanoparticles as catalyst in biofuel production from grape residue and seeds oil. *Waste and Biomass Valorization*, 2020, 11, 5003-5013.
23. O. Opri, A. Ciorîță, 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. Lazar, 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 Fe₃O₄ nanoparticles for Lanasy 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 Babeş-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.
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