

LISTA DE LUCRĂRI

a) Lista celor maximum 10 lucrări relevante

1. **Darie-Ion, L.**, Petre, BA., “An update on multiplexed mass spectrometry- based lysosomal storage disease diagnosis.” *Mass Spectrometry Reviews*, **2023**, 1-15; <https://doi.org/10.1002/mas.21864> **IF 6.9 / Q1**
2. Iavorschi, M., Lupaescu, AV., **Darie-Ion, L.**, Indeykina, M., Hitruc, EG., Petre, BA., Cu and Zn Interactions with Peptides Revealed by High Resolution Mass Spectrometry, *Pharmaceuticals*, **2022**, 15(9), 1096; <https://doi.org/10.3390/ph15091096> **IF 4.3 / Q1**
3. **Darie-Ion, L.**; Whitham, D.; Jayathirtha, M.; Rai, Y.; Neagu, A.-N.; Darie, C.C.; Petre, B.A. Applications of MALDI-MS/MS-Based Proteomics in Biomedical Research. *Molecules* **2022**, 27, 6196; <https://doi.org/10.3390/molecules27196196> **IF 4.2 / Q2**
4. Mocanu, CS., **Darie-Ion, L.**, Petre, BA., Gradinaru, VR., Drochioiu, G. A computational study of metal ions interaction with amyloid- β 1–42 peptide structure in hyperpyrexia: Implications for Alzheimer disease. *Journal of King Saud University-Science*, **2022**, 34(6), 102184. <https://doi.org/10.1016/j.jksus.2022.102184> **IF 3.7 / Q1**
5. **Darie Ion, L.**, Neamtu, A., Iliescu, R., Petre, BA., Immuno-affinity study of oxidative tyrosine containing peptides, *Int J Pept Res Ther*, **2022**, 28, 41; <https://doi.org/10.1007/s10989-021-10329-2> **IF 2.0 / Q4**
6. **Darie-Ion, L.**, Jayathirtha, M., Hitruc, EG., Zaharia, MM., Gradinaru, VR., Darie, CC., Pui, A., Petre, BA., A proteomic approach to identify zein proteins upon eco-friendly ultrasound-based extraction, *Biomolecules*, **2021**, 11(12), 1838; <https://doi.org/10.3390/biom11121838> **IF 4.8 / Q1**
7. Maeser, S., Petre, BA., **Ion, L.**, Rawer, S., Kohlschütter, A., Santorelli, FM., Simonati, A., Schulz, A., Przybylski, M., Enzymatic diagnosis of neuronal lipofuscinoses in dried blood spots using substrates for concomitant tandem mass spectrometry and fluorimetry. *J. Mass Spectrom.*, **2021** 29:e4675; <https://doi.org/10.1002/jms.4675> **IF 1.9 / Q2**
8. Postu, PA*, **Ion, L***, Drochioiu, G., Petre, BA., Glocker, MO. “Mass spectrometric characterization of the zein protein composition in maize flour extracts upon protein

separation by SDS-PAGE and 2D gel electrophoresis”, *Electrophoresis*, **2019**, 40 (20) :2747-2758; doi.org/10.1002/elps.201900108, (**contribuție egală*) **IF 3.0 / Q2**

9. **Ion, L.**, Ciobanu, C., Murariu, M., Gradinaru, RV., Drochioiu, G. “SDS-induced peptide conformational changes: From triglycyl-glycine to amyloid- β oligomers associated with Alzheimer’s disease”. *Int. J. Pept. Res. Ther.* **2016**, 22: 45-55,; DOI: [10.1007/s10989-015-9483-7](https://doi.org/10.1007/s10989-015-9483-7) **IF 2.0 / Q4**
10. Drochioiu, G., Ciobanu, C., Bancila, S., **Ion, L.**, Petre, BA., Andries, C., Gradinaru, RV., Murariu, M. ”Ultrasound-based protein determination in maize seeds”. *Ultrason. Sonochem.*, **2016**, 29: 93–103; <https://doi.org/10.1016/j.ultsonch.2015.09.007> **IF 8.7 / Q1**

b) Teza sau tezele de doctorat

Titlul tezei: „*Compuși cu legături peptidice și aplicațiile lor biomedicale*”

Școala Doctorală de Chimie, Universitatea ”Alexandru Ioan Cuza” din Iași, susținută public în data de 27.11.2015 ([Link teză](#))

c) Brevete de invenție și alte titluri de proprietate industrială

Nu este cazul

d) Cărți și capitole de cărți

1. **Ion, L.**, Petre, BA. “Immuno – affinity Mass Spectrometry: A Novel Approaches with Biomedical Relevance”. *Adv. Exp. Med. Biol.*, Springer, **2019**, 1140:377-388, DOI: [10.1007/978-3-030-15950-4_21](https://doi.org/10.1007/978-3-030-15950-4_21)
2. Jureschi, M., Lupaescu, A.V., **Ion, L.**, Petre, BA., Drochioiu, G. Stoichiometry of heavy metal binding to peptides involved in Alzheimer’s disease: mass spectrometric evidence. *Adv. Exp. Med. Biol.*, Springer, **2019**, 1140:401-415, DOI: [10.1007/978-3-030-15950-4_23](https://doi.org/10.1007/978-3-030-15950-4_23)

e) Articole/studii in extenso, publicate în reviste din fluxul științific internațional principal

1. Lupu, A., Gradinaru, LM., Balan-Porcarasu, M., **Darie-Ion, L.**, Petre, BA., Gradinaru, VR., The hidden power of a novel collagen octapeptide: Unveiling its antioxidant and cofactors releasing capacity from polyurethane based systems. *Reactive and Functional*

- Polymers*, **2025**, 207, 106131, <https://doi.org/10.1016/j.reactfunctpolym.2024.106131>, **IF 4.5 / Q1**
2. **Darie-Ion, L.**, Petre, BA., “An update on multiplexed mass spectrometry- based lysosomal storage disease diagnosis.” *Mass Spectrometry Reviews*, **2023**, 1-15, <https://doi.org/10.1002/mas.21864>, **IF 6.9 / Q1**
 3. Jitaru, SC., Neamtu, A., Drochioiu, G., **Darie-Ion, L.**, Stoica, I., Petre, BA., Gradinaru, VR. A Diphenylalanine Based Pentapeptide with Fibrillating Self-Assembling Properties. *Pharmaceutics* **2023**, 15, 371. <https://doi.org/10.3390/pharmaceutics15020371> **IF 4.9 / Q1**
 4. Iavorschi, M., Lupaescu, AV., **Darie-Ion, L.**, Indeykina, M., Hitruc, EG., Petre, BA., Cu and Zn Interactions with Peptides Revealed by High Resolution Mass Spectrometry, *Pharmaceutics*, **2022**, 15(9), 1096; <https://doi.org/10.3390/ph15091096> **IF 4.3 / Q1**
 5. **Darie-Ion, L.**, Whitham, D., Jayathirtha, M., Rai, Y., Neagu, A.N., Darie, C.C., Petre, BA. Applications of MALDI-MS/MS-Based Proteomics in Biomedical Research. *Molecules* **2022**, 27, 6196. <https://doi.org/10.3390/molecules27196196> **IF 4.2 / Q2**
 6. Mocanu, CS., **Darie-Ion, L.**, Petre, BA., Gradinaru, VR., Drochioiu, G. A computational study of metal ions interaction with amyloid- β 1–42 peptide structure in hyperpyrexia: Implications for Alzheimer disease. *Journal of King Saud University-Science*, **2022**, 34(6), 102184. <https://doi.org/10.1016/j.jksus.2022.102184> **IF 3.7 / Q1**
 7. **Darie Ion, L.**, Neamtu, A., Iliescu, R., Petre, BA., Immuno-affinity study of oxidative tyrosine containing peptides, *Int J Pept Res Ther*, **2022**, 28, 41. <https://doi.org/10.1007/s10989-021-10329-2> **IF 2.0 / Q4**
 8. **Darie-Ion, L.**, Jayathirtha, M., Hitruc, EG., Zaharia, MM., Gradinaru, VR., Darie, CC., Pui, A., Petre, BA., A proteomic approach to identify zein proteins upon eco-friendly ultrasound-based extraction, *Biomolecules* **2021**, 11(12), 1838; <https://doi.org/10.3390/biom11121838> **IF 4.8 / Q1**
 9. Mocanu, CS., Petre, BA., **Darie-Ion, L.**, Drochioiu, G., Niculaua, M., Stoica, I., Homociana M., Nita, LE., Gradinaru, VR. Structural Characterization of a New Collagen Biomimetic Octapeptide with Nanoscale Self-assembly Potential: Experimental and Theoretical Approaches. *ChemPlusChem*, 87(2): e202100462, **2021**. <https://doi.org/10.1002/cplu.202100462> **IF 3.0 / Q2**
 10. Maeser, S., Petre, BA., **Ion, L.**, Rawer, S., Kohlschütter, A., Santorelli, FM., Simonati, A., Schulz, A., Przybylski, M., Enzymatic diagnosis of neuronal lipofuscinoses in dried blood spots using substrates for concomitant tandem mass spectrometry and fluorimetry. *J. Mass Spectrom.*, **2021**

29:e4675. <https://doi.org/10.1002/jms.4675> IF 1.9 / Q2

11. Postu, PA*, **Ion, L***, Drochioiu, G., Petre, BA., Glocker, MO. “Mass spectrometric characterization of the zein protein composition in maize flour extracts upon protein separation by SDS-PAGE and 2D gel electrophoresis”, *Electrophoresis*, **2019**, 40(20):2747-2758, <https://doi.org/10.1002/elps.201900108>, (**contribuție egala*) IF 3.0 / Q2
12. Lupaescu, A., Jureschi, M., Ciobanu, C., **Ion, L.**, Zbancioc, G., Petre, BA., Drochioiu, G. “FTIR and MS evidence for heavy metal binding to anti-amyloid NAP-like peptides” *Int. J. Pept. Res. Ther.*, **2019**, 25: 303-305, <https://doi.org/10.1007/s10989-018-9672-2> IF 2.0 / Q4
13. Murariu, M., **Ion. L.**, Ciobanu, C., Petre, BA., and Drochioiu, G. “MS, CD, and FT-IR characterization of five newly synthesized histidine-containing Ala- and Gly-based peptides” *Rev. Roum. Chim.*, **2017**, 62(3), 277-289. IF 0.4 / Q4
14. **Ion, L.**, Ciobanu, C., Murariu, M., Gradinaru, RV., Drochioiu, G. “SDS-induced peptide conformational changes: From triglycyl-glycine to amyloid- β oligomers associated with Alzheimer’s disease”. *Int. J. Pept. Res. Ther.* 22: 45-55, **2016**. DOI: [10.1007/s10989-015-9483-7](https://doi.org/10.1007/s10989-015-9483-7) IF 2.0 / Q4
15. Drochioiu, G., Ciobanu, C., Bancila, S., **Ion, L.**, Petre, BA., Andries, C., Gradinaru, RV., Murariu, M. “Ultrasound-based protein determination in maize seeds”. *Ultrason Sonochem*, **2016**, 29: 93–103, <https://doi.org/10.1016/j.ultsonch.2015.09.007> IF 8.7 / Q1
16. Drochioiu, G., **Ion, L.**, Ciobanu, C., Habasescu, L., Mangalagiu, I. Letter: Mass spectrometric approach of high pH- and copper-induced glutathione oxidation, *Eur. J. Mass Spectrom.* **2013**; 19: 71–75, <https://doi.org/10.1255/ejms.1210> IF 1.1 / Q3
17. Surleva, A., Zaharia, M., **Ion, L.**, Gradinaru, RV., Drochioiu, G., and Mangalagiu, I., “Ninhydrin-based spectrophotometric assays of trace cyanide”, *Acta Chemica Iasi*, **2013**; 21: 57–70, DOI:10.2478/achi-2013-0006 IF 0.4 / Q4

f) Publicații in extenso apărute în lucrări ale principalelor conferințe internaționale de specialitate

1. **Darie-Ion, L.**, Drochioiu, G., Jitaru, S.C., Mocanu, C.S., Petre, B.A. “Drug-Peptide Conjugates: Solid Phase Synthesis and Mass Spectrometric Characterization”. vol 21:59-66, **2021**, ISBN:978-619-7603-30-9, ISSN:1314-2704, DOI: 10.5593/sgem2021/6.1/s25.14

2. **Darie-Ion, L.**, Drochioiu, G., Pui, A., Mihalcea, E., Gradinaru, V.R. “Zein Conjugates of Biomedical Interest: Synthesis and Characterization by MALDI-ToF Mass Spectrometry and Fourier Transform Infrared Spectroscopy”. vol 21:155-162, **2021**, ISBN:978-619-7603-30-9, ISSN:1314-2704, DOI: 10.5593/sgem2021/6.1/s25.38
3. **Ion, L.**, Jureschi, M., Lupaescu, A., Petre, B. A., Drochioiu, G., Metal ions binding to amyloid-beta and neuroprotective NAP-like peptides: MS, FT-IR and AFM investigations. vol 20: 259-266, ISBN: 978-619-7603-12-5, ISSN: 1314-2704, **2020**, 10.5593/sgem2020/6.1/s25.034
4. **Ion, L.**, Drochioiu, G., Lupaescu, A., Jureschi, M., Petre, B. A. Amyloid β and anti amyloid peptides involved in Alzheimer`s disease: Interactions with metal ions. 19(6.1) 515-522, 2019. ISBN 978-619-7408-88-1; ISSN 1314-2704, **2019**, DOI: 10.5593/sgem2019/6.1
5. Drochioiu, G., Cloșcă, C. M., **Ion, L.**, Pelin, I., Gradinaru, R. V. Bacteriorhodopsin from Halobacterium salinarium is a key compound in bioenergetics. 19(6.1) 575-582, 2019. ISBN 978-619-7408-88-1; ISSN 1314-2704, **2019**, DOI: 10.5593/sgem2019/6

g) Alte publicații

Participări la manifestări științifice:

Internaționale

1. **Darie-Ion, L.**, Gradinaru, V.R., Petre, B.A., Extraction and characterization of zein protein: a new approach – **poster** - 22nd Romanian International Conference on Chemistry and Chemical Engineering, Sinaia, Romania, 7-9 Septembrie 2022
2. **Darie-Ion, L.**, Hitruc, E.G., Pui, A., Petre, B.A., A Proteomic Approach to Identify Zein Proteins upon Eco-Friendly Ultrasound-Based Extraction – **poster** - Athens Conference on Advances in Chemistry, National and Kapodistrian University of Athens, Greece, 26 June – 1 July 2022
3. Jayaweera, T., **Darie-Ion, L.**, Jayathirtha, M., Darie, C., Petre, B.A., A Proteomic Approach to Identify Zein Proteins upon Eco-friendly Ultrasound-Based Extraction. – **poster** - 70th ASMS Conference on Mass Spectrometry and Allied Topics, Minneapolis, Minnesota, USA 5-9 June 2022
4. **Darie-Ion, L.**, Pui, A., Petre, B-A., Zein Conjugates with Potential Controlled Drug Delivery

- Properties - **prezentare orală**- 28th International Multidisciplinary Conference "Recent Research and Ideas" 12-14 May 2022 – online
5. **Darie-Ion, L.**, Gradinaru, V-R., Pui, A., Petre, B-A., Zein extraction and zein-based conjugates: synthesis and characterization - **prezentare orală** - 27th World Congress on Biotechnology April 29-30, 2022 - online
 6. **Darie-Ion, L.**, Gradinaru, V-R., Petre, B-A., Zein Conjugates of Biomedical Interest: Synthesis and Characterization – **prezentare orală** - Global Pharma Summit 2022, 11-12 March 2022 – online
 7. Jitaru, S.C., Mocanu, C.S., Gradinaru, R.V., Petre, B.A., **Ion, L.**, Stoica, I., Drochioiu, G., - Copper Binding Studies And PH-Triggered Assembly Of A Double Phe-Flanked Peptide - **prezentare orală** - 12th International Conference on Engineering & Natural Sciences, Bingöl, Turcia, 24-25 December 2021 - online
 8. **Darie-Ion, L.**, Jitaru, S.C., Petre, B.A., Pui, A., – Optimization of ultrasound assisted extraction of protein from corn - **prezentare orală** - 10th International Conference on Environment Science and Biotechnology, Osaka, Japonia, 16-18 Decembrie 2021 – online
 9. **Darie-Ion, L.**, Hitruc, E.G., Zaharia, M.M., Gradinaru, V.R., Petre, B.A., – Effect of different fractions and granulations of zein on physicochemical properties of ultrasound-assisted zein extraction from corn – **prezentare orală** - 26th International Multidisciplinary Conference “Recent Research and Ideas”, Gent University, Belgia, 10-11 Decembrie 2021 – online
 10. **Darie-Ion, L.**, Pui, A., Petre, B.A., – “Extraction and characterization of zein protein: a new approach” – **prezentare orală** - 15- The 10th International Conference on Biomedical Engineering and Biotechnology, Suzhou, China, 18 Noiembrie 2021 – online
 11. **Darie-Ion, L.**, Iavorschi, M., Lupaescu, A.V., Zaharia, M., Petre, B.A., – “An optimized ultrasound-based protein determination in maize seeds” – **poster** - 11th International Conference on Biotechnology and Bioengineering, 27-29 Octombrie 2021 – online
 12. **Darie-Ion, L.**, Iavorschi, M., Lupaescu, A.V., Pui, A., – “Zein extraction and zein-based conjugates synthesis” – **prezentare orală** - 25th International Conference on Multidisciplinary Studies, ICMS XXV University of Southern California, USA, 17-18 Septembrie 2021 – online
 13. **Darie-Ion, L.**, Drochioiu, G., Jitaru, S.C., Mocanu, S.C., Petre, B.A., - Drug-Peptide Conjugates: Solid Phase Synthesis and Mass Spectrometric Characterization” – **prezentare orală** - XXIth International Multidisciplinary Scientific GeoConference Surveying, Geology and Mining,

Ecology and Management, SGEM 2021, Albena, Bulgaria, 4-22 August 2021

14. **Darie-Ion, L.**, Drochioiu, G., Pui, A., Mihalcea, E., Gradinaru, V.R., – “Zein Conjugates of Biomedical Interest: Synthesis and Characterization by MALDI-ToF Mass Spectrometry and Fourier Transform Infrared Spectroscopy” – **poster** - XXIth International Multidisciplinary Scientific GeoConference Surveying, Geology and Mining, Ecology and Management, SGEM 2021, Albena, Bulgaria, 4-22 August 2021
15. **Darie-Ion, L.**, Lupaescu, A.V., Iavorschi, M., Pui, A., Petre, B.A., “Proteomic-based approach for the characterization of maize protein” – **prezentare orală** - 5th International Conference on Biochemistry and Molecular Biology, 07-08 Iulie 2021 – online
16. **Darie-Ion, L.**, Pui., A. Ultrasound-Assisted Extraction of Zein from Corn”- **poster** - First Canadian Peptide and Protein Community Virtual Symposium, CPPC2021, 27-28 May 2021 - online
17. **Ion, L.**, Jureschi, M., Lupaescu, A., Petre, B.A., Drochioiu, G. - Metal Ions Binding to Amyloid-Beta and Neuroprotective Nap-Like Peptides: MS, FT-IR and AFM Investigations – **poster** - XXth International Multidisciplinary Scientific GeoConference Surveying, Geology and Mining, Ecology and Management – SGEM, Albena, Bulgaria, 16 august – 25 august 2020.
18. **Ion, L.**, Jureschi, M., Mocanu, C., Lupaescu, A., Petre, B.A., Drochioiu, G. - Heavy metal ions binding to beta-amyloid and anti-amyloid peptides – **prezentare orală** - 23rd International Conference on Multidisciplinary Studies: "Resilience for Survival", University of Cambridge, Anglia, 30 – 31 Iulie 2020
19. **Ion, L.**, Dimitriu, C., Przybylski, M., Petre, B.A., Enzymatic Diagnosis of Lysosomal Storage Disorders using Substrates for Fluorimetry and MRM-Mass Spectrometry – **prezentare orală** - Annual International Conference of the Romanian Society of Biochemistry and Molecular Biology, 26-27 September 2019, Iași, Romania.
20. **Ion, L.**, Dimitriu, C., Przybylski, M., Petre, B.A., Clinical Diagnostics of Lysosomal Storage Disorders using MRM-MS and Fluorimetric Approaches – **prezentare orală** - 21st Romanian International Conference on Chemistry and Chemical Engineering, Constanta, Romania, 4-7 September, 2019.
21. **Ion, L.**, Lupaescu, A., Jureschi, M., Petre, B.A., Drochioiu, G. - Amyloid- β and anti-amyloid peptides involved in Alzheimer`s disease: interactions with metal ions – **poster** - XIX

- International Multidisciplinary Scientific GeoConference SGEM*, Albena, Bulgaria, 28 June - 7 July, 2019.
22. Drochioiu, G., Cloșcă, C. M., **Ion, L.**, Pelin, I., Gradinaru, RV. Bacteriorhodopsin from *Halobacterium salinarum* is a key compound in bioenergetics – **prezentare orală** - *XIX International Multidisciplinary GeoConference SGEM2019*, Albena, Bulgaria, 28 Iunie - 7 Iulie, 2019
23. Petre, B.A., **Ion, L.**, Dimitriu, C., Maeser, S., Kleinekofort, W., Bulei, C., Przybylski, M. Clinical Diagnostics of Lysosomal Storage Diseases in DBS Using New Substrates by MRM-MS – **poster** - *67th ASMS Conference On Mass Spectrometry*, Atlanta, Georgia, USA, June 2 - 6, 2019.
24. Postu, P.A., **Ion, L.**, Ruß, M., Petre, B.A., Glocker, M.O., - Mass Spectrometric Characterization of the Zein Protein Composition in Maize Flour by SDS-PAGE and 2D Gel Electrophoresis – **poster** - *52nd Annual DGMS Conference*, Rostock, Germany, 10 – 13 March 2019.
25. Brdar, B., Maeser, S., Petre, B.A., **Ion, L.**, Kohlschütter, A., Bräulke, T., Santorelli, F., Schulz, A., Przybylski, M. - Clinical Diagnostics of Neuronal Ceroid Lipofuscinoses (NCL-1, NCL-2 and NCL-10) using New Substrates for Tandem Mass Spectrometry and Fluorimetry – **poster** - *52nd Annual DGMS Conference*, Rostock, Germany, 10 – 13 March 2019.
26. **Ion, L.**, Cozma, C., Dimitriu, D.C., Przybylski, M., Petre, B.A. - Enzyme Activity Determination of Lysosomal Storage Disorders by Novel Analytical Approaches – **prezentare orală** – *2nd Int. Summer School “PROTEOMICS – from Introduction to Clinical Applications”*, Iasi, Romania, 9-13 July 2018.
27. **Ion, L.**, Lupaescu, A., Jureschi, M., Drochioiu, G. - Proteomic-based Approaches for the Characterization of Peptides Associated with Alzheimer’s Disease – **prezentare orală** – *9th International Conference and Expo on Proteomics and Molecular Medicine*, Paris, France, 13-15 November 2017.
28. **Ion, L.**, Cozma, C., Maeser, S., Dimitriu, C., Przybylski, M., Petre, B.A. - Clinical Diagnostics of Lysosomal Storage Disorders by Fluorimetry and MRM-Mass spectrometry – **prezentare orală** – *Int. Workshop Affinity - Mass spectrometry – New Methods for Biochemical and Clinical Applications*, Rüsselsheim am Main, Germany, 2-3 November 2017.
29. M. Jureschi, **L. Ion**, B.-A. Petre, C.-I. Ciobanu, G. Drochioiu, Solid synthesis and analysis by mass spectrometry of fragments derived from amyloid- β peptide and their complexes with various metal - **poster** - *Sciences et Technologies SCITECH*, Sofia, Bulgaria, 28 Septembrie 2017.

30. A.-V. Lupăescu, M. Matei, **L. Ion**, B.-A. Petre, Ghe. Zbancioc, C.-I. Ciobanu, G. Drochioiu, Structural characterization of a synthesized peptide with potential neuroprotective activity against neuroinflammation in Alzheimer disease – **poster** - *Sciences et Technologies SCITECH*, Sofia, Bulgaria, 28 Septembrie 2017.
31. **Ion, L.**, Cozma, C., Dimitriu, D.C., Przybylski, M., Petre, B.A. - Enzyme Activity Determination of Lysosomal Storage Disorders by Novel Analytical Approaches – **prezentare orală** - *1st Int. Summer School “PROTEOMICS – from Introduction to Clinical Applications”*, Iasi, Romania, 9-13 June 2017.
32. **Ion, L.**, Hritcu, L., Dimitriu, C., Maeser, S., Przybyski, M., Petre, B.A., - **prezentare orală** - *3rd International Conference on Analytical Chemistry*, Iasi, Romania, 29-31 August 2016.
33. Petre, B.A., **Ion, L.**, Andries, C., Gau, B., Gross, M. Molecular characterization of neuronal protein aggregates by a new mass spectrometric approach - **prezentare orală** - *19th Romanian International Conference on Chemistry and Chemical Engineering*, Sibiu, Romania, 2-5 Septembrie 2015.
34. **Ion, L.**, Petre, B.-A., Braulke, T., Schulz, A., and Przybylski, M. Clinical Diagnostics of Neuronal Ceroid Lipofuscinoses on Dry Blood Spots: Development of New Cathepsin Substrates for MRM-MS Determination” – **poster** - *61ST ASMS Conference on Mass Spectrometry and Allied Topics*, USA, 31-4 Iunie 2015.
35. **Ion, L.**, Andrieș, C., Przybylski M. and Petre, B.-A. Lysosomal Storage Diseases: Development of ESI- ion trap diagnostic assay for MPS II and MPS VI. Multiplexing possibilities – **poster** - *48. Annual Meeting of the German Society for Mass Spectrometry*, Wuppertal, Germania, 1-4 Martie 2015.
36. Andrieș, C., Slamnoiu, S., **Ion, L.**, Przybylski M. and Petre, B.-A. Identification, recognition structures and affinities of nitrated tyrosine sites by affinity mass spectrometry - **prezentare orală** - *48. Annual Meeting of the German Society for Mass Spectrometry*, Wuppertal, Germania, 1-4 Martie 2015.
37. Andrieș, C., **Ion, L.**, Gross, M. and Petre, B.-A.- Mass spectrometric base approaches for studying oligomerization of β -amyloid peptide at amino acid levels”- **poster** - *48. Annual Meeting of the German Society for Mass Spectrometry*, Wuppertal, Germania, 1-4 Martie 2015.
38. **Ion, L.**, Cozma, C., Andrieș, C., Przybylski, M. and Petre, B.-A. Specific lysosomal diagnostic for MPS II / MPS VI patients by fluorimetry and mass spectrometry - **poster** - *Affinity-Mass*

Spectrometry in Life Sciences; Diagnostics & Therapy Development of Lysosomal Diseases,
Rüsselsheim, Germania, 24-25 Noiembrie 2014

39. **Ion, L.**, Andrieș, C., Slamnoiu, S., Przybylski, M., Drochioiu, G. and Petre, B.-A. Pathophysiological oxidative protein modifications: nitration versus hydroxylation of tyrosine – **poster** - 3^{eme} Colloque Franco-Roumain de Chimie Médicinale, Iași, Romania, 30-31 Octombrie 2014.
40. Drochioiu, G., Murariu, M., **Ion, L.**, Habasescu, L. Iron and aluminum interaction with amyloid-beta peptides associated with Alzheimer's disease – **prezentare orală** - 10th International Conference of Computational Methods in Sciences and Engineering, Atena, Grecia, 4-7 Aprilie 2014.
41. **Ion, L.**, Cozma, C., Andrieș, C., Przybylski, M. and Petre, B.-A. Specific lysosomal diagnostic for MPS II / MPS VI patients by fluorimetry and mass spectrometry - **poster** - 47. Annual Meeting of the German Society for Mass Spectrometry 2014, Goethe University, Frankfurt, 2-5 Martie 2014
42. Andries, C., **Ion, L.**, Gau, B., Gross, M., Drochioiu, G. and Petre, B.-A. Molecular characterization of neuronal protein aggregates by massspectrometry-based footprinting methods – **poster** - 47. Annual Meeting of the German Society for Mass Spectrometry 2014, Goethe University, Frankfurt, 2-5 Martie 2014
43. Cozma, C., **Ion, L.**, Iurascu, M.-I., Maeser, S. and Przybylski, M., Novel Approach on Clinical Diagnostic of Lysosomal Storage Disease in DBSs by Fluorimetry and MRM-MS using Coumarin Derivates based Substrates – **prezentare orală** - 47. Annual Meeting of the German Society for Mass Spectrometry 2014, Goethe University, Frankfurt, 2-5 Martie 2014.
44. **Ion, L.**, Cozma, C., Przybylski, M., Drochioiu, G. and Petre, B.-A. Lysosomal Storage Disease: Characterization and Diagnostics – **prezentare orală** - 18th Romanian International Conference on Chemistry and Chemical Engineering, Sinaia, Romania, 4-7 Septembrie 2013.
45. Petre, B.-A., **Ion, L.**, Andries, C., Gau, B., Drochioiu, G. and Gross, M. Hydrogen/ deuterium exchange – mass spectrometry for molecular characterization of neuronal protein aggregates – **prezentare orală** - 18th Romanian International Conference on Chemistry and Chemical Engineering, Sinaia, Romania, 4-7 Septembrie 2013.
46. **Ion, L.**, Andrieș, C., Cozma, C., Przybylski, M. and Petre, B.-A., Lysosomal Storage Diseases: MRM-MS and fluorimetric diagnostics”- **prezentare orală** - 7th Summer Course for Mass Spectrometry in Biotechnology and Medicine, Dubrovnik, Croatia, 7-13 Iulie 2013.

47. Cozma, C., Iurascu, M.-I., Paraschiv, G., **Ion, L.**, Petre, B.-A., Mühl, A., Maeser, S. and Przybylski, M. Clinical Diagnostics Approaches of Lysosomal Storage Diseases on DBSs by Fluorimetry and MRM-MS Using Identical α -hydroxy-coumarin based substrates – **poster** - 61ST ASMS Conference on Mass Spectrometry and Allied Topics Minneapolis, Minnesota, USA, 9-13 Iunie 2013.
48. **Ion, L.**, Andries, C., Stumbaum, M., Przybylski, M. and Petre, B.-A. Mass spectrometric based methods for rigorous characterization of antibody-antigen interaction – **poster** - 11th Conference on Colloid and Surface Chemistry, Iasi, Romania, 9-11 Mai 2013.
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Naționale

1. Pascu, M., **Darie-Ion, L.**, Petre, B.A., Characterization and identification of zein proteins upon ultrasound-assisted extraction – **prezentare orală** - “Sustainable Foods For A Safety Future: A Healthy And Quality Life Vision”, Facultatea de Știința și Ingineria Alimentelor, Universitatea „Dunărea De Jos” din Galați 26-27 Martie 2022
2. **Darie-Ion, L.**, Drochioiu, G., Darie, C.C., Petre, B.A., – “Mass Spectrometric Characterization of the Zein Protein Composition in Maize Flour „Eco- Friendly” Extracts” – **prezentare orală** - New trends in Biology: from molecules to complex systems, Iași, Romania, 28 – 29 Octombrie 2021 – online
3. Jureschi, M., **Ion, L.**, Petre, B.-A., Ciobanu, C.-I., Drochioiu, G. - Synthesis of some analogs of A β (9-16) peptide and their interaction with metal ions. – **prezentare orală** - Sesiunea de Comunicări Științifice a Studenților, Masteranzilor si Doctoranzilor, Iași, 20-21 iunie 2019.
4. Lupăescu, A.-V., Petre, B.-A., Ciobanu, C.-I., **Ion, L.**, Drochioiu, G., - Synthesis and characterization of anti-amyloid peptides – **prezentare orală** - Sesiunea de Comunicări Științifice a Studenților, Masteranzilor si Doctoranzilor, Iași, 20-21 iunie 2019.
5. Dimitriu, D.C., **Ion, L.**, Gorduza, E.V., Augustin, G., Petre, B.A. - Enzyme Activity Determination by Fluorimetric Methods in some Lysosomal Storage Diseases – **prezentare orală** - Al 2-lea Congres Național al Asociației de Medicină de Laborator din România, cu participare

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6. Dimitriu, D.C., **Ion, L.**, Andrieș, C., Petrescu, E.D., Petre, B.A. - New Approaches for Diagnosing Lysosomal Storage Diseases – **prezentare orală** - *al IX-lea Congres Național de Biologie Celulară și Moleculară*, Iasi, Romania, 7-11 iunie 2017.
7. **Ion, L.**, Andrieș, C., Maeser, S., Drochioiu, G., Przybylski, M., Petre, B.A. Clinical diagnostics of lysosomal storage diseases on dry blood spots: MRM-MS and fluorimetric determinations – **prezentare orală** - *Zilele Universității "Alexandru Ioan Cuza"*, Romania, 31-1 Octombrie 2015.
8. **Ion, L.**, Cozma, C., Andrieș, C., Drochioiu, G., Przybylski M. and Petre, B.-A. Lysosomal Storage Disease. Characterization and Diagnostics of MPS II and MPS VI – **prezentare orală** - *University days "Alexandru Ioan Cuza University of Iași"*, Romania, 31-1 Octombrie 2014.
9. **Ion, L.**, Stumbaum, M., Przybylski, M., Drochioiu, G. and Petre, B.-A. Binding Affinities Studies of Nitrated Model Peptides to Anti-3-Nitrotyrosine Antibody” – **poster** - *33rd National conference of Chemistry Căciulata*, Romania, 1–3 Octombrie 2014.
10. **Ion, L.**, Andrieș, C., Drochioiu, G., Petre, B.-A. Oxidative modifications in proteins: Synthesis and structural characterization of tyrosine modified peptides – **poster** – *Zilele Universitatii „Alexandru Ioan Cuza” of Iași*, 25-26 Octombrie 2012.
11. Petre, B.-A., Andrieș, C., **Ion, L.**, Drochioiu, G., Przybylski, M., Ulrich, M., Doering, G. When is mass spectrometry combined with affinity approaches essential? A case study of Tyrosine nitration in proteins – **prezentare orală** - *Zilele Universitatii „Alexandru Ioan Cuza” of Iași*, 25-26 Octombrie 2012.
12. **Ion, L.**, Cozma, C., Drochioiu, G., Przybylski, M., Petre, B.-A. Chemical synthesis of new MPS I substrates” – **poster** - *32nd National conference of Chemistry, Căciulata*, 3-5 Octombrie 2012