

**FIȘA privind standardele minimale pe domenii
ale Universității pentru posturile didactice pe durată determinată**

ASISTENT	CHIMIE
Criterii minimale	- minimum 3 articole științifice publicate <i>in extenso</i> în reviste internaționale, cu factor ISI cumulat minimum 4; - autor principal la 2 articole științifice publicate <i>in extenso</i> în reviste internaționale cotate ISI.
Rezultat autoevaluare	✓ 17 articole științifice publicate <i>in extenso</i> în reviste internaționale, cu factor ISI cumulat 57.8 ✓ autor principal la 6 articole științifice publicate <i>in extenso</i> în reviste internaționale cotate ISI

Nr.crt.	Articole științifice publicate <i>in extenso</i> în reviste științifice internaționale cotate ISI	Factor de impact*
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. <i>Reactive and Functional Polymers</i> , 2025 , 207, 106131, https://doi.org/10.1016/j.reactfunctpolym.2024.106131	4.5
2.	Darie-Ion, L. , Petre, BA., “An update on multiplexed mass spectrometry- based lysosomal storage disease diagnosis.” <i>Mass Spectrometry Reviews</i> , 2023 , 1-15, https://doi.org/10.1002/mas.21864	6.9
3.	Jitaru, S.C., Neamtu, A., Drochioiu, G., Darie-Ion, L. , Stoica, I., Petre, BA., Gradinaru, VR. A Diphenylalanine Based Pentapeptide with Fibrillating Self-Assembling Properties. <i>Pharmaceutics</i> 2023 , 15, 371. https://doi.org/10.3390/pharmaceutics15020371	4.9

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, *Pharmaceuticals*, **2022**, 15(9), 1096; <https://doi.org/10.3390/ph15091096> **4.3**
5. **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> **4.2**
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> **3.7**
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>. **2.0**
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> **4.8**
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> **3.0**
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> **1.9**
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, doi.org/10.1002/elps.201900108, (***contributie egală**) **3.0**
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> **2.0**

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. **0.4**
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) **2.0**
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, **8.7**
<https://doi.org/10.1016/j.ultsonch.2015.09.007>
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> **1.1**
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](https://doi.org/10.2478/achi-2013-0006) **0.4**

*Factor de impact Clarivate Analytics - Mai 2025