

I. Fișa de verificare a îndeplinirii standardelor minimale pe domenii ale Universității Alexandru Ioan Cuza din Iași Concursul de promovare - post de Profesor universitar

I.a. Fișa de evaluare privind standardele minimale obligatorii stabilite de comisia CHIMIE din cadrul CNATDCU (<i>Anexa I</i>);					îndeplinit
I.b. Se vor lua in considerare maxim 2 articole publicate în aceeași revistă într-un an calendaristic;					îndeplinit
I.c) Două cărți/ capitole de carte de specialitate:					îndeplinit
I.c.1.* M. Jureschi, A. V. Lupaescu, L. Ion, B. A. Petre*, and G. Drochioiu, <i>Stoichiometry of Heavy Metal Binding to Peptides Involved in Alzheimer's Disease: Mass Spectrometric Evidence</i>, <i>Advances in experimental medicine and biology – Springer</i>, (2019), 401-415; doi.org/10.1007/978-3-030-15950-4_23; I.c.2.* Ion, Laura, and Brîndușa Alina Petre*, "Immuno-Affinity Mass Spectrometry: A Novel Approaches with Biomedical Relevance." <i>Advances in experimental medicine and biology– Springer</i>, (2019): 377-388. I.c.3.* Petre*, B.A. <i>Affinity – mass spectrometry approaches for elucidating structures and interactions of protein – ligand complexes in Advances in experimental medicine and biology – Springer</i>, (2014), 806:129-151. DOI: 10.1007/978-3-319-06068-2_7. I.c.4. Petre B. A., Drăgușanu M., Przybylski M. (2008), <i>Molecular recognition specificity of anti-3-nitrotyrosine antibodies revealed by affinity- mass spectrometry and immunoanalytical methods in: "Applications of Mass Spectrometry in Life Sciences"</i>, Springer - ISBN 978-1-4020-8811-7, page 55-67. I.c.5. Vrinceanu N, A.B. Petre, Mihaela C, Popovici E, Pui A, Coman D, et al. <i>Zinc Oxide — Linen Fibrous Composites: Morphological, Structural, Chemical, Humidity Adsorptive and Thermal Barrier Attributes. Modern Surface Engineering Treatments. InTech</i>; 2013. https://doi.org/10.5772/55705 * Capitole de carte cotate ISI					
I.Id. În ultimii 5 ani să fi obținut pentru articole științifice cel puțin 25% din punctajul minimal solicitat de către comisia de Chimie din cadrul CNATDCU					îndeplinit
Criterii Prof. Univ.	N_{max}^(*)	FIC^(**)	FIC_D^(***)	FIC_{AP}^(****)	FIC_{AC}^(*****)
Cerințe CNATDCU	50	100	70	50	25
Cerințe minimale UAIC (25%) din cerințele CNATDCU	12,5	25	17,5	12,5	6,25
Realizate (2021-2025)	23	88,1	88,1	39,2	37,2

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Nr. Crt.	Lista articole în ordinea descrescătoare a factorilor de impact:	IF* 2024	DOI
1	Darie-Ion L, Petre B.A.* , “An update on multiplexed mass spectrometry- based lysosomal storage disease diagnosis.” Mass Spectrometry Reviews , (2023), 1-15, DOI:10.1002/mas.21864;	6,6	https://doi.org/10.1002/mas.21864
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3	S. C. Jitaru, A. Neamtu, G. Drochioiu, L. Darie-Ion, I. Stoica, B.-A. Petre* , V.-R. Gradinaru, A diphenylalanine based pentapeptide with fibrillating self-assembling properties, Pharmaceutics 2023, 15(2), 371; DOI:10.3390/pharmaceutics15020371;	5,5	https://doi.org/10.3390/pharmaceutics15020371
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| 20 | M. Jayathirtha, E. J. Dupree, Z. Manzoor, B. Larose, Z. Sechrist, A. Neagu, B.-A. Petre , C. C. Darie, Mass Spectrometric (MS) Analysis of Proteins and Peptide, <i>Current Protein & Peptide Science</i> , (2021), DOI: 10.2174/1389203721666200726223336; | 2,0 | https://doi.org/10.2174/1389203721666200726223336 |

21	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. <i>J. Mass Spectrom.</i> (2021), 29:e4675. DOI: 10.1002/jms.4675;	2,0	https://doi.org/10.1002/jms.4675
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*conform actualizarii Clarivate din 2025		Total	92,8

Data: 08.06.2026

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3	L. Darie-Ion, M. Jayathirtha, G. E. Hitruc, M.-M. Zaharia, R. V. Gradinaru, C. C. Darie, A. Pui and B. A. Petre* , A Proteomic Approach to Identify Zein Proteins upon Eco-Friendly Ultrasound-Based Extraction, <i>Biomolecules</i> , (2021), 11, 1838.	4,8	https://doi.org/10.3390/biom11121838
4	Iavorschi, M.; Lupăescu, A.-V.; Darie-Ion, L.; Indeykina, M.; Hitruc, G.E.; Petre, B.A.* Cu and Zn Interactions with Peptides Revealed by High-Resolution Mass Spectrometry. <i>Pharmaceutics</i> , (2022) , 15, 1096. DOI:10.3390/ph15091096;	4,8	https://doi.org/10.3390/ph15091096
5	Jayathirtha, M.; Jayaweera, T.; Whitham, D.; Sullivan, I.; Petre B.A.* ; Darie, C.C.; Neagu, A.-N. “Two-Dimensional-PAGE Coupled with nLC-MS/MS-Based Identification of Differentially Expressed Proteins and Tumorigenic Pathways in MCF7 Breast Cancer Cells Transfected for JTB Protein Silencing.” <i>Molecules</i> , 2023 , 28, 7501. DOI:10.3390/molecules28227501	4,6	https://doi.org/10.3390/molecules28227501
6	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, <i>Molecules</i> (2022) , 27, 6196. DOI:10.3390/molecules27196196;	4,6	https://doi.org/10.3390/molecules27196196
7	Medjour, A., Petre, B.A.* , Hammadi, M., Salhi, I., Dbara, M. and Hamidechi, M.A. (2024) Impact of breeding system transition on camel milk caseins. <i>Int J Dairy Technol</i> , 77: 813-826, DOI:10.1111/1471-0307.13075;	2,8	https://doi.org/10.1111/1471-0307.13075
8	Darie-Ion, A. Neamtu, R. Iliescu, B.A. Petre* , Immuno-Affinity Study of Oxidative Tyrosine Containing Peptides, 2022, <i>International Journal of Peptide Research and Therapeutics</i> (2022) 28:41, DOI:10.1007/s10989-021-10329-2;	2,4	https://doi.org/10.1007/s10989-021-10329-2
9	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. <i>J. Mass Spectrom.</i> (2021), 29:e4675. DOI: 10.1002/jms.4675;	2,0	https://doi.org/10.1002/jms.4675
10	Jung, J. E., Cárdenas V., Petre BA* , “Epitope identification of a Lys63 linkage ubiquitin antibody by mass spectrometric epitope excision and extraction approaches.” <i>Eur. J. Mass Spectrom.</i> , (2023) , DOI:10.1177/14690667231199012;	0,8	https://doi.org/10.1177/14690667231199012
11	A.-V. Lupaescua , L. Ion-Darieb , B.A. Petre* , F. Ursachid and M. Oroian, Proteomic analysis and antioxidant evaluation of ultrasound - assisted pollen extracts, ACTA CHEMICA IASI, 30_2, 138-150 (2022);	0,3	https://www.chem.uaic.ro/file_s/File/acta-chemica/aci_vol_30_no2_2022/7.pdf
*conform actualizării Clarivate din 2025		Total	39,2

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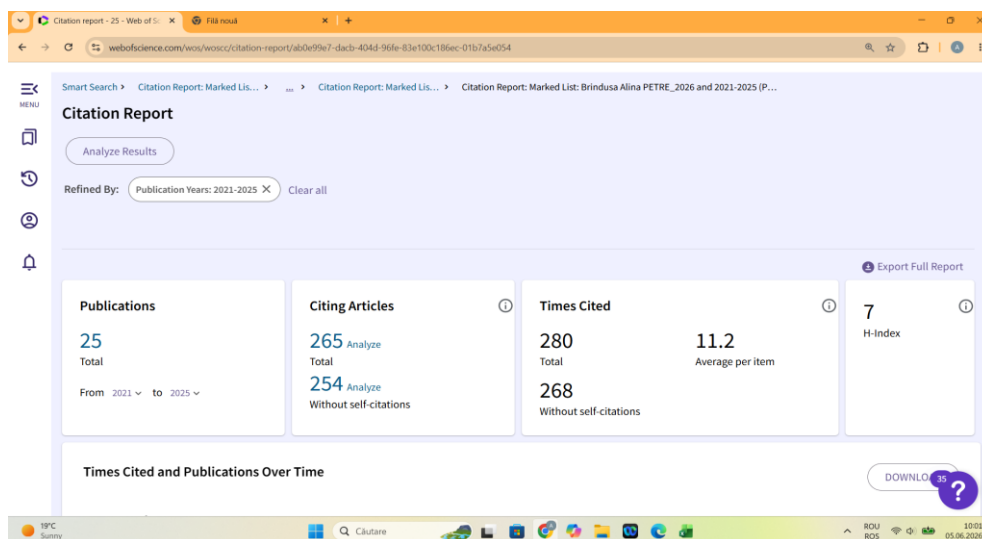
L1.d) Fișa de verificare a îndeplinirii condiției ca în ultimii 5 ani să fi obținut pentru articole științifice cel puțin 25% din punctajul minimal solicitat de către comisia de Chimie din cadrul CNATDCU - publicații în calitate de autor de corespondență

Nr. Crt.	Lista articole în ordinea descrescătoare a factorilor de impact:	IF* 2024	DOI
1	Darie-Ion L, Petre B.A.* , “An update on multiplexed mass spectrometry- based lysosomal storage disease diagnosis.” <i>Mass Spectrometry Reviews</i> , (2023), 1-15, DOI:10.1002/mas.21864;	6,6	https://doi.org/10.1002/mas.21864
2	S. C. Jitaru, A. Neamtu, G. Drochioiu, L. Darie-Ion, I. Stoica, B.-A. Petre* , V.-R. Gradinaru, A diphenylalanine based pentapeptide with fibrillating self-assembling properties, <i>Pharmaceutics</i> 2023 , 15(2), 371; DOI:10.3390/pharmaceutics15020371;	5,5	https://doi.org/10.3390/pharmaceutics15020371
3	L. Darie-Ion, M. Jayathirtha, G. E. Hitruc, M.-M. Zaharia, R. V. Gradinaru, C. C. Darie, A. Pui and B. A. Petre* , A Proteomic Approach to Identify Zein Proteins upon Eco-Friendly Ultrasound-Based Extraction, <i>Biomolecules</i> , (2021), 11, 1838.	4,8	https://doi.org/10.3390/biom1121838
4	Iavorschi, M.; Lupăescu, A.-V.; Darie-Ion, L.; Indeykina, M.; Hitruc, G.E.; Petre, B.A.* Cu and Zn Interactions with Peptides Revealed by High-Resolution Mass Spectrometry. <i>Pharmaceutics</i> , (2022) , 15, 1096. DOI:10.3390/ph15091096;	4,8	https://doi.org/10.3390/ph15091096
5	Jayathirtha, M.; Jayaweera, T.; Whitham, D.; Sullivan, I.; Petre B.A.* ; Darie, C.C.; Neagu, A.-N. “Two-Dimensional-PAGE Coupled with nLC-MS/MS-Based Identification of Differentially Expressed Proteins and Tumorigenic Pathways in MCF7 Breast Cancer Cells Transfected for JTB Protein Silencing.” <i>Molecules</i> , 2023 , 28, 7501. DOI:10.3390/molecules28227501	4,6	https://doi.org/10.3390/molecules28227501
6	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, <i>Molecules</i> (2022) , 27, 6196. DOI:10.3390/molecules27196196;	4,6	https://doi.org/10.3390/molecules27196196
7	Medjour, A., Petre, B.A.* , Hammadi, M., Salhi, I., Dbara, M. and Hamidechi, M.A. (2024) Impact of breeding system transition on camel milk caseins. <i>Int J Dairy Technol</i> , 77: 813-826, DOI:10.1111/1471-0307.13075;	2,8	https://doi.org/10.1111/1471-0307.13075
8	Darie-Ion, A. Neamtu, R. Iliescu, B.A. Petre* , Immuno-Affinity Study of Oxidative Tyrosine Containing Peptides, 2022, <i>International Journal of Peptide Research and Therapeutics</i> (2022) 28:41, DOI:10.1007/s10989-021-10329-2;	2,4	https://doi.org/10.1007/s10989-021-10329-2
10	Jung, J. E., Cárdenas V., Petre BA* , “Epitope identification of a Lys63 linkage ubiquitin antibody by mass spectrometric epitope excision and extraction approaches.” <i>Eur. J. Mass Spectrom.</i> , (2023) , DOI:10.1177/14690667231199012;	0,8	https://doi.org/10.1177/14690667231199012
11	A.-V. Lupaescua , L. Ion-Darieb , B.A. Petre* , F. Ursachid and M. Oroian, Proteomic analysis and antioxidant evaluation of ultrasound - assisted pollen extracts, <i>ACTA CHEMICA IASI</i> , 30_2, 138-150 (2022);	0,3	https://www.chem.uaic.ro/file/acta-chemica/aci_vol_30_no2_2022/7.pdf
*conform actualizării Clarivate din 2025		Total	37,2

L1.d) Fișa de verificare a îndeplinirii condiției ca în ultimii 5 ani să fi obținut pentru articole științifice cel puțin 25% din punctajul minimal solicitat de către comisia de Chimie din cadrul CNATDCU - h index *

*autocitarile au fost excluse

1



Criterii CNATDCU

h index = 13

Criterii UAIC

h index = 3,25

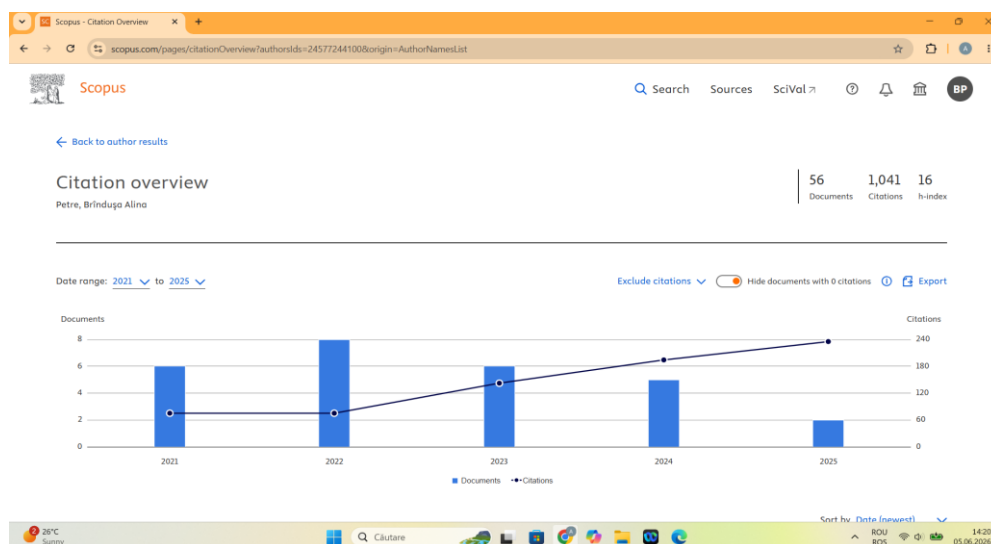
WOS h index = 7*

SCOPUS h index = 16**

* calculat considerand citarile din ultimii 5 ani pentru toate articolele

** calculat considerand citarile din ultimii 5 ani pentru articolele publicate in ultimii 5 ani

2



Data: 08.06.2026

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Anexa I

Universitatea „Alexandru Ioan Cuza” din Iași

Facultatea de Chimie

Conf.univ. dr. habil. Brîndușa Alina PETRE

**I.a) Fișa de evaluare privind standardele minimale obligatorii stabilite de comisia CHIMIE din cadrul CNATDCU
Concursul de promovare - post de Profesor universitar**

Criterii Prof. Univ.	$N_{\max}^{(*)}$	FIC^(**)	FIC_D^(***)	FIC_{AP}^(****)	FIC_{AC}^(*****)	h index
Cerințe	50	100	70	50	25	13
Realizate	49	171,9	167,2	56.9	47.5	WOS - 19 Scopus - 20 Google scholars - 20

(*) $N_{\max}$ - primele maxim N lucrări, organizate în ordinea descrescătoare a factorilor de impact a revistelor în care au fost publicate;

(**) FIC - factorul de impact cumulat minimal al revistelor în care s-au publicat lucrările în cauză;

(***) FIC_D - factorul de impact cumulat minimal din publicații în domeniile de cercetare declarate;

(****) FIC_{AP} - factorul de impact cumulat minimal din publicații în calitate de autor principal (prim-autor și autor de corespondență);

(*****) FIC_{AC} - factorul de impact cumulat minimal din publicații în calitate de autor de corespondență.

Data: 08.06.2026

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I.2. Îndeplinirea Factorului de impact pe domeniu de cercetare declarat:

Nr. Crt.	Lista articole în ordinea descrescătoare a factorilor de impact:	IF* 2024	DOI
1	N. N. Condurache, I. Aprodu, L. Grigore-Gurgu, B.A. Petre , E. Enachia, G. Râpeanu, G. E. Bahrima, N. Stănciuc, Fluorescence spectroscopy and molecular modeling of anthocyanins binding to bovine lactoferrin peptides, Food Chemistry , (2020), 318, 126508, DOI:10.1016/j.foodchem.2020.126508;	9,8	https://doi.org/10.1016/j.foodchem.2020.126508
2	G. Drochioiu, C. I. Ciobanu, S. Bancila, L. Ion, B.A. Petre , C. Andries, R. V. Gradinaru, M. Murariu, "Ultrasound-based protein determination in maize seeds", Ultrasonics Sonochem. (2016), 29, 93–103. DOI:10.1016/j.ultsonch.2015.09.007;	9,7	https://doi.org/10.1016/j.ultsonch.2015.09.007
3	Darie-Ion L, Petre B.A.* , "An update on multiplexed mass spectrometry- based lysosomal storage disease diagnosis." Mass Spectrometry Reviews , (2023) , 1-15, DOI:10.1002/mas.21864;	6,6	https://doi.org/10.1002/mas.21864
4	R. S. Boiangiu, M. Mihasan, L. D. Gorgan, B. A. Stache, B.A. Petre , L. Hritcu, Cotinine and 6-hydroxy-L-nicotine reverses memory deficits and reduces oxidative stress in Aβ25-35-induced rat model of Alzheimer's disease, Antioxidants (Basel) , (2020), 9(8): 768, DOI: 10.3390/antiox9080768;	6,6	https://doi.org/10.3390/antiox9080768
5	L. Grigore-Gurgu, M. Cotârleț, M. Pihurov, B. Păcularu-Burada, A. M. Vasile, E. Enachi, C. L. Chițescu, B. A. Petre , L. Dumitrașcu, D. Borda, N. Stănciuc, G.-E. Bahrim, Lactiplantibacillus plantarum and Lactiplantibacillus paraplantarum postbiotics: Assessment of the biotic-derived metabolites with cytocompatibility and antitumoral potential, Food Bioscience , 59, 2024, 103863. DOI:10.1016/j.fbio.2024.103863;	5,9	https://doi.org/10.1016/j.fbio.2024.103863
6	S. C. Jitaru, A. Neamtu, G. Drochioiu, L. Darie-Ion, I. Stoica, B.-A. Petre* , V.-R. Gradinaru, A diphenylalanine based pentapeptide with fibrillating self-assembling properties, Pharmaceutics 2023 , 15(2), 371; DOI:10.3390/pharmaceutics15020371;	5,5	https://doi.org/10.3390/pharmaceutics15020371
7	Jitaru, S.-C.; Enache, A.-C.; Cojocaru, C.; Drochioiu, G.; Petre, B.-A. ; Gradinaru, V.-R. "Self-Assembly of a Novel Pentapeptide into Hydrogelated Dendritic Architecture: Synthesis, Properties, Molecular Docking and Prospective Applications." Gels , 2024 , 10, 86. DOI:10.3390/gels10020086;	5,3	https://doi.org/10.3390/gels10020086
8	A. Lupu, L. M. Gradinaru, M. Balan-Porcarasu, L. Darie-Ion, B.-A. Petre , V.-R. Gradinaru, The hidden power of a novel collagen octapeptide: Unveiling its antioxidant and cofactors releasing capacity from polyurethane based systems, Reactive and Functional Polymers , 207, 2025,106131; DOI:10.1016/j.reactfunctpolym.2024.106131;	5,1	https://doi.org/10.1016/j.reactfunctpolym.2024.106131
9	Gradinaru, V.R.; Bercea, M.; Gradinaru, L.M.; Puiu, A.; Lupu, A.; Petre, B.A. Targeting Injectable Hydrogels: The Role of Diphenylalanine Peptide Derivative in the Gelation Dynamics of Pluronic® F127. Polymers 2025, 17, 930, DOI:10.3390/polym17070930;	4,9	https://doi.org/10.3390/polym17070930
10	Jayathirtha, M.; Jayaweera, T.; Whitham, D.; Petre, B.A. ; Neagu, A.-N.; Darie, C.C. "Two-Dimensional Polyacrylamide Gel Electrophoresis Coupled with Nanoliquid Chromatography–Tandem Mass Spectrometry-Based Identification of Differentially Expressed Proteins and Tumorigenic Pathways in the MCF7 Breast Cancer Cell Line Transfected for Jumping Translocation Breakpoint Protein Overexpression." Int. J. Mol. Sci. 2023 , 24, 14714. DOI:10.3390/ijms241914714;	4,9	https://doi.org/10.3390/ijms241914714
11	L. Darie-Ion, M. Jayathirtha, G. E. Hitruc, M.-M. Zaharia, R. V. Gradinaru, C. C. Darie, A. Pui and B. A. Petre* , A Proteomic Approach to Identify Zein Proteins upon Eco-Friendly Ultrasound-Based Extraction, Biomolecules , (2021), 11, 1838.	4,8	https://doi.org/10.3390/biom11121838
12	Grigore-Gurgu L, Crăciunescu O, Aprodu I, Bolea CA, Iosăgeanu A, Petre B.A. , Bahrim GE, Oancea A, Stănciuc N. Tailoring the Health-Promoting Potential of Protein Hydrolysate Derived from Fish Wastes and Flavonoids from Yellow Onion Skins: From Binding Mechanisms to Microencapsulated Functional Ingredients, Biomolecules (2020), 7;10(10):1416. DOI:10.3390/biom10101416;	4,8	https://doi.org/10.3390/biom10101416
13	Iavorschi, M.; Lupăescu, A.-V.; Darie-Ion, L.; Indeykina, M.; Hitruc, G.E.; Petre, B.A.* Cu and Zn Interactions with Peptides Revealed by High-Resolution Mass Spectrometry. Pharmaceutics , (2022) , 15, 1096. DOI:10.3390/ph15091096;	4,8	https://doi.org/10.3390/ph15091096

- 14 Jayathirtha, M.; Jayaweera, T.; Whitham, D.; Sullivan, I.; **Petre B.A.***; Darie, C.C.; Neagu, A.-N. "Two-Dimensional-PAGE Coupled with nLC-MS/MS-Based Identification of Differentially Expressed Proteins and Tumorigenic Pathways in MCF7 Breast Cancer Cells Transfected for JTB Protein Silencing." *Molecules*, **2023**, 28, 7501. DOI:10.3390/molecules28227501 4,6 <https://doi.org/10.3390/molecules28227501>
- 15 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. DOI:10.3390/molecules27196196; 4,6 <https://doi.org/10.3390/molecules27196196>
- 16 A.-N. Neagu, M. Jayathirtha, E. Baxter, M. Donnelly, **B. A. Petre** and C. C. Darie, Applications of Tandem Mass Spectrometry (MS/MS) in Protein Analysis for Biomedical Research, *Molecules* (**2022**), 27, 2411. DOI:10.3390/molecules27082411; 4,6 <https://doi.org/10.3390/molecules27082411>
- 17 D.-A. Blaj, M. Balan-Porcarasu, **B.A. Petre**, V. Harabagiu, C. Peptu, MALDI mass spectrometry monitoring of cyclodextrin-oligolactide derivatives synthesis, *Polymer* (**2021**), 233, DOI:10.1016/j.polymer.2021.124186; 4,5 <https://doi.org/10.1016/j.polymer.2021.124186>
- 18 Postu, J. Noumedem, O. Cioanca, M. Hancianu, M. Mihasan, **B.A. Petre**, L. Hritcu, Lactuca capensis reverses memory deficits in Aβ1-42-induced an animal model of Alzheimer's disease, *J. Cell. Mol. Med.* (**2018**), 22(1), 111-122, DOI: 10.1111/jcmm.13299. 4,2 <https://doi.org/10.1111/jcmm.13299>
- 19 Ulrich*, M., **Petre A***, N. Youhnovski, D. Worlitzsch, M. Schirle, M. Schumm J. Lee, J. Checkel, M. Dinauer, P. Schmid, F. Ratjen, M. Przybylski, G. Döring, "Post-translational tyrosine nitration of eosinophil granule toxins mediated by eosinophil peroxidase", *J. Biol. Chem.* (**2008**), 283 (42): 28629-28640, DOI:10.1074/jbc.M801196200; 3,9 <https://doi.org/10.1074/jbc.M801196200>
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- 21 A.-N. Neagu, M. Jayathirtha, D. Whitham, P. Mutsengi, I. Sullivan, **B.-A. Petre**, C. C. Darie, "Proteomics-Based Identification of Dysregulated Proteins in Breast Cancer", *Proteomes* (**2022**), 10, 35. DOI:10.3390/proteomes10040035; 3,6 <https://doi.org/10.3390/proteomes10040035>
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- 26 Medjour, A., Petre, B.A., Hammadi, M., Salhi, I., Dbara, M. and Hamidechi, M.A. (2024), Impact of breeding system transition on camel milk caseins. *Int J Dairy Technol*, 77: 813-826, DOI:10.1111/1471-0307.13075; 2,8 <https://doi.org/10.1111/1471-0307.13075>
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- 30 M. Drăgușan, **B.A Petre**, S. Slamnoiu, T. Tu, M. Gross, M. Przybylski "Online bioaffinity-electrospray mass spectrometry for structure identification and quantification of protein-ligand interactions", *J. Am. Soc. Mass Spectrom.* (2010), 21(10): 1643-8, DOI:10.1016/j.jasms.2010.06.011; 2,7 <https://doi.org/10.1016/j.jasms.2010.06.011>
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- 32 P.A. Postu, L. Ion, G. Drochioiu, **B.A. Petre***, and M. O. Glocker, "Mass Spectrometric Characterization of the Zein Protein Composition in Maize Flour Extracts upon Protein Separation by SDS-PAGE and 2 D Gel Electrophoresis", *Electrophoresis*, (2019), 40, 2747–2758, DOI: 10.1002/elps.201900108; 2,5 <https://doi.org/10.1002/elps.201900108>
- 33 Darie-Ion, A. Neamtu, R. Iliescu, **B.A. Petre***, Immuno-Affinity Study of Oxidative Tyrosine Containing Peptides, 2022, *International Journal of Peptide Research and Therapeutics* (2022) 28:41, DOI:10.1007/s10989-021-10329-2; 2,4 <https://doi.org/10.1007/s10989-021-10329-2>
- 34 Habasescu, L., Jureschi, M., **Petre, B.A.**, Mihai, M., Gradinaru, RV., Murariu, M., Drochioiu, G., "Histidine-Lacked A beta(1-16) Peptides: pH-Dependent Conformational Changes in Metal Ion Binding". *Int. J. Peptide Research and Therapeutics* . (2020), DOI: 10.1007/s10989-020-10048-0; 2,4 <https://doi.org/10.1007/s10989-020-10048-0>
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- 36 A. Lupaescu, M. Jureschi, C.-I. Ciobanu, L. Ion, G Zbancioc, **B.A. Petre**, G. Drochioiu, "FTIR and MS Evidence for Heavy Metal Binding to Anti-amyloid NAP-Like Peptides, *Int. J. Peptide Research and Therapeutics*, (2019), 25, 303–309, DOI:10.1007/s10989-018-9672-2; 2,0 <https://doi.org/10.1007/s10989-018-9672-2>
- 37 M. Jayathirtha, E. J. Dupree, Z. Manzoor, B. Larose, Z. Sechrist, A. Neagu, **B-A. Petre**, C. C. Darie, Mass Spectrometric (MS) Analysis of Proteins and Peptide, *Current Protein & Peptide Science*, (2021), DOI: 10.2174/1389203721666200726223336; 2,0 <https://doi.org/10.2174/1389203721666200726223336>
- 38 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. DOI: 10.1002/jms.4675; 2,0 <https://doi.org/10.1002/jms.4675>
- 39 Dragusanu M., **Petre B.A.**, Przybylski M. Epitope motif of an anti-nitrotyrosine antibody specific for nitrotyrosine- modified peptides revealed by affinity-mass spectrometry, *J. Pept. Sci.* (2011), 17(3): 184-191, DOI:10.1002/psc.1298; 1,8 <https://doi.org/10.1002/psc.1298>
- 40 C. A. Okai, M. Wölter, M. Russ, C. Koy, **B.A. Petre**, W. Rath, U. Pecks, M. O. Glocker, Profiling of intact blood proteins by matrix-assisted laser desorption/ionization mass spectrometry without the need for freezing – Dried serum spots as future clinical tools for patient screening. *Rapid Commun Mass Spectrom.* (2021), 35:e9121, DOI:10.1002/rcm.9121; 1,7 <https://doi.org/10.1002/rcm.9121>
- 41 Bernevic B., **Petre B.A.**, Galetskiy D., Werner C., Wicke M., Schellander K., Przybylski M., "Degradation and oxidation postmortem of myofibrillar proteins in porcine skeleton muscle revealed by high resolution mass spectrometric proteome analysis", *Int. J. Mass Spectrom.* (2011), 305 (2-3):217-227, DOI:10.1016/j.ijms.2010.11.010; 1,7 <https://doi.org/10.1016/j.ijms.2010.11.010>
- 42 Jung, J. E., Cárdenas V., **Petre BA***, "Epitope identification of a Lys63 linkage ubiquitin antibody by mass spectrometric epitope excision and extraction approaches." *Eur. J. Mass Spectrom.*, (2023), DOI:10.1177/14690667231199012; 0,8 <https://doi.org/10.1177/14690667231199012>
- 43 A-V. Lupaescu, I. Humelnicu, **B. A. Petre**, C-I. Ciobanu and G. Drochioiu, "Direct evidence for binding of aluminum to NAP anti-amyloid peptide and its analogs", *Eur. J. Mass Spectrom.*, (2020), 26(2):106-116, DOI: 10.1177/1469066719877714; 0,8 <https://doi.org/10.1177/1469066719877714>

44	Petre B.A., Youhnovski N., Lukkari J., Weber R., Przybylski M., "Structural Characterisation of tyrosine-nitrated peptides by ultraviolet and infrared matrix-assisted laser desorption/ionization Fourier transforms ion cyclotron resonance mass spectrometry", <i>Eur. J. Mass Spectrom.</i> (2005), 11, 513-518;	0,8	https://doi.org/10.1255/ejms.777
45	Jureschi, M., Humelnicu, I., Petre, B. A*, Ciobanu, C. I., Murariu, M., Drochioiu, G. Solid phase synthesis of four analogs of amyloid- β (9-16) peptide: MS and FT-IR characterization. <i>Rev. Roum. Chim.</i> , (2019), 64(5), 433-443, DOI:10.33224/rch.2019.64.5.07;	0,6	https://revroum.lew.ro/wp-content/uploads/2019/05/Art%2007.pdf
46	Lupaescu, A. V., Ciobanu, C. I., Humelnicu, I., Petre, B. A*, Murariu, M., Drochioiu, G., Design and synthesis of new anti-amyloid NAP-based/like peptides. <i>Rev. Roum. Chim.</i> , (2019), 64(6), 535-546, DOI:10.33224/rch/2019.64.6.10;	0,6	https://doi.org/10.33224/rch/2019.64.6.10
47	Murariu, M., Ion, L., Ciobanu, C.I., Petre, B.A. and Drochioiu, G., "MS, CD, and FT-IR characterization of five newly synthesized histidine-containing Ala- and Gly-based peptides", <i>Rev. Roum Chim</i> , (2017), 62(3), 277-289	0,4	https://revroum.lew.ro/wp-content/uploads/2017/3/Art%2010.pdf
48	A.-V. Lupaescua , L. Ion-Darieb , B.A. Petre, F. Ursachid and M. Oroian, Proteomic analysis and antioxidant evaluation of ultrasound - assisted pollen extracts, ACTA CHEMICA IASI, 30_2, 138-150 (2022);	0,3	https://www.chem.uaic.ro/files/File/acta-chemica/aci_vol_30_no2_2022/7.pdf
*conform actualizarii Clarivate din 2025		Total	167,2

Data: 08.06.2026

Conf. univ. dr. habil. Brindusa Alina PETRE

I.3. Îndeplinirea Factorului de impact în calitate de autor principal (prim-autor și autor de corespondență):

Nr. Crt.	Lista articole în ordinea descrescătoare a factorilor de impact:	IF* 2024	DOI
1	Darie-Ion L, Petre B.A.* , "An update on multiplexed mass spectrometry- based lysosomal storage disease diagnosis." <i>Mass Spectrometry Reviews</i> , (2023), 1-15, DOI:10.1002/mas.21864;	6,6	https://doi.org/10.1002/mas.21864
2	S. C. Jitaru, A. Neamtu, G. Drochioiu, L. Darie-Ion, I. Stoica, B.-A. Petre* , V.-R. Gradinaru, A diphenylalanine based pentapeptide with fibrillating self-assembling properties, <i>Pharmaceutics</i> 2023, 15(2), 371; DOI:10.3390/pharmaceutics15020371;	5,5	https://doi.org/10.3390/pharmaceutics15020371
3	L. Darie-Ion, M. Jayathirtha, G. E. Hitruc, M.-M. Zaharia, R. V. Gradinaru, C. C. Darie, A. Pui and B. A. Petre* , A Proteomic Approach to Identify Zein Proteins upon Eco-Friendly Ultrasound-Based Extraction, <i>Biomolecules</i> , (2021), 11, 1838.	4,8	https://doi.org/10.3390/biom11121838
4	Iavorschi, M.; Lupăescu, A.-V.; Darie-Ion, L.; Indeykina, M.; Hitruc, G.E.; Petre, B.A.* Cu and Zn Interactions with Peptides Revealed by High-Resolution Mass Spectrometry. <i>Pharmaceutics</i> , (2022), 15, 1096. DOI:10.3390/ph15091096;	4,8	https://doi.org/10.3390/ph15091096
5	Jayathirtha, M.; Jayaweera, T.; Whitham, D.; Sullivan, I.; Petre B.A.* ; Darie, C.C.; Neagu, A.-N. "Two-Dimensional-PAGE Coupled with nLC-MS/MS-Based Identification of Differentially Expressed Proteins and Tumorigenic Pathways in MCF7 Breast Cancer Cells Transfected for JTB Protein Silencing." <i>Molecules</i> , 2023, 28, 7501. DOI:10.3390/molecules28227501	4,6	https://doi.org/10.3390/molecules28227501
6	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, <i>Molecules</i> (2022), 27, 6196. DOI:10.3390/molecules27196196;	4,6	https://doi.org/10.3390/molecules27196196
7	Ulrich*, M., Petre A* , N. Youhnovski, D. Worlitzsch, M. Schirle, M. Schumm J. Lee, J. Checkel, M. Dinauer, P. Schmid, F. Ratjen, M. Przybylski, G. Döring, "Post-translational tyrosine nitration of eosinophil granule toxins mediated by eosinophil peroxidase", <i>J. Biol. Chem.</i> (2008), 283 (42): 28629-28640, DOI:10.1074/jbc.M801196200;	3,9	https://doi.org/10.1074/jbc.M801196200
8	EJ. Dupree, M. Jayathirtha, H Y., B.-A. Petre* , M. Mihasan, C. C. Darie, "A critical review of bottom-up proteomics: the good, the bad, and the future of this field", <i>Proteomes</i> , (2020), 8(14), DOI:10.3390/proteomes8030014;	3,6	https://doi.org/10.3390/proteomes8030014
9	R. Ionita, P. A. Postu, G. J. Beppe, M. Mihasan, B.A. Petre* , M. Hancianu, O. Cioanca, L. Hritcu, "Cognitive-enhancing and antioxidant activities of the aqueous extract from Markhamia tomentosa (Benth.) K. Schum. stem bark in a rat model of scopalamine", <i>Behavioral and Brain Functions</i> , (2017), 13:5, DOI:10.1186/s12993-017-0123-6;	3,3	https://doi.org/10.1186/s12993-017-0123-6
10	Medjour, A., Petre, B.A.* , Hammadi, M., Salhi, I., Dbara, M. and Hamidechi, M.A. (2024), Impact of breeding system transition on camel milk caseins. <i>Int J Dairy Technol</i> , 77: 813-826, DOI:10.1111/1471-0307.13075;	2,8	https://doi.org/10.1111/1471-0307.13075
11	Petre* B.A. , Ulrich M., Stumbaum M., Bernevic ., Moise A., Döring G., Przybylski M. When is Mass Spectrometry Combined with Affinity Approaches Essential? A Case Study of Tyrosine Nitration in Proteins, <i>J. Am. Soc. Mass Spectrom</i> , (2012), 23(11): 1831-1840, DOI:10.1007/s13361-012-0461-4;	2,7	https://doi.org/10.1007/s13361-012-0461-4
12	P.A. Postu, L. Ion, G. Drochioiu, B.A. Petre* , and M. O. Glocker, "Mass Spectrometric Characterization of the Zein Protein Composition in Maize Flour Extracts upon Protein Separation by SDS-PAGE and 2 D Gel Electrophoresis", <i>Electrophoresis</i> , (2019), 40, 2747–2758, DOI: 10.1002/elps.201900108;	2,5	https://doi.org/10.1002/elps.201900108
13	Darie-Ion, A. Neamtu, R. Iliescu, B.A. Petre* , Immuno-Affinity Study of Oxidative Tyrosine Containing Peptides, 2022, <i>International Journal of Peptide Research and Therapeutics</i> (2022) 28:41, DOI:10.1007/s10989-021-10329-2;	2,4	https://doi.org/10.1007/s10989-021-10329-2
14	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. <i>J. Mass Spectrom.</i> (2021), 29:e4675. DOI: 10.1002/jms.4675;	2,0	https://doi.org/10.1002/jms.4675
15	Jung, J. E., Cárdenas V., Petre BA* , "Epitope identification of a Lys63 linkage ubiquitin antibody by mass spectrometric epitope excision and extraction approaches." <i>Eur. J. Mass Spectrom.</i> , (2023), DOI:10.1177/14690667231199012;	0,8	https://doi.org/10.1177/14690667231199012
16	Petre B.A. , Youhnovski N., Lukkari J., Weber R., Przybylski M., "Structural Characterisation of tyrosine-nitrated peptides by ultraviolet and infrared matrix-assisted laser desorption/ionization Fourier transforms ion cyclotron resonance mass spectrometry", <i>Eur. J. Mass Spectrom.</i> (2005), 11, 513-518;	0,8	https://doi.org/10.1255/ejms.777
17	Jureschi, M., Humelnicu, I., Petre, B. A* , Ciobanu, C. I., Murariu, M., Drochioiu, G. Solid phase synthesis of four analogs of amyloid- β (9-16) peptide: MS and FT-IR characterization. <i>Rev. Roum. Chim.</i> , (2019), 64(5), 433-443, DOI:10.33224/rch.2019.64.5.07;	0,6	https://revroum.lew.ro/wp-content/uploads/2019/05/Art%2007.pdf
18	Lupaescu, A. V., Ciobanu, C. I., Humelnicu, I., Petre, B. A* , Murariu, M., Drochioiu, G., Design and synthesis of new anti-amyloid NAP-based/like peptides. <i>Rev. Roum. Chim.</i> , (2019), 64(6), 535-546, DOI:10.33224/rch.2019.64.6.10;	0,6	https://doi.org/10.33224/rch.2019.64.6.10
*conform actualizării Clarivate din 2025		Total	56,9

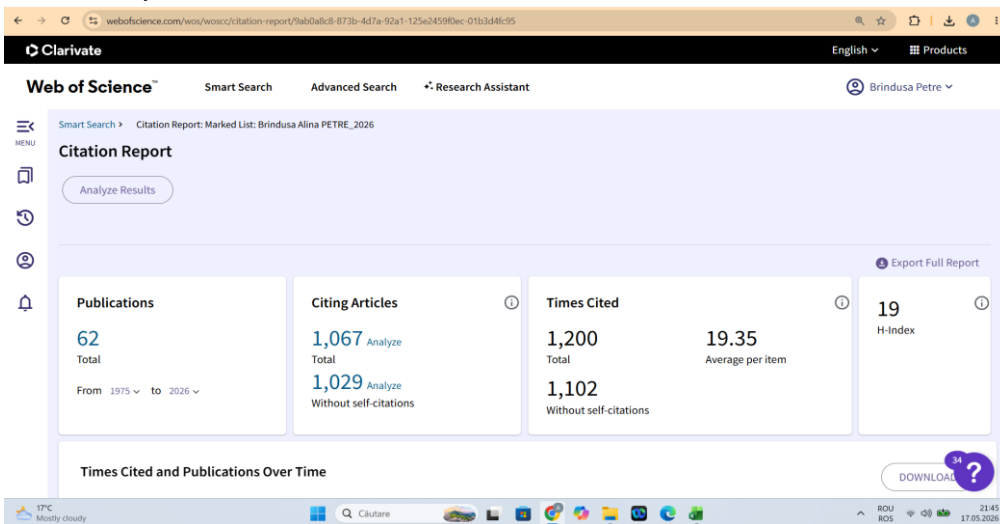
I.3. Îndeplinirea Factorului de impact în calitate de autor de corespondență):

Nr. Crt.	Lista articole în ordinea descrescătoare a factorilor de impact:	IF* 2024	DOI
1	Darie-Ion L, Petre B.A.* , “An update on multiplexed mass spectrometry- based lysosomal storage disease diagnosis.” <i>Mass Spectrometry Reviews</i> , (2023) , 1-15, DOI:10.1002/mas.21864;	6,6	https://doi.org/10.1002/mas.21864
2	S. C. Jitaru, A. Neamtu, G. Drochioiu, L. Darie-Ion, I. Stoica, B.-A. Petre* , V.-R. Gradinaru, A diphenylalanine based pentapeptide with fibrillating self-assembling properties, <i>Pharmaceutics</i> 2023 , 15(2), 371; DOI:10.3390/pharmaceutics15020371;	5,5	https://doi.org/10.3390/pharmaceutics15020371
3	L. Darie-Ion, M. Jayathirtha, G. E. Hitruc, M.-M. Zaharia, R. V. Gradinaru, C. C. Darie, A. Pui and B. A. Petre* , A Proteomic Approach to Identify Zein Proteins upon Eco-Friendly Ultrasound-Based Extraction, <i>Biomolecules</i> , (2021), 11, 1838.	4,8	https://doi.org/10.3390/biom11121838
4	Iavorschi, M.; Lupăescu, A.-V.; Darie-Ion, L.; Indeykina, M.; Hitruc, G.E.; Petre, B.A.* Cu and Zn Interactions with Peptides Revealed by High-Resolution Mass Spectrometry. <i>Pharmaceutics</i> , (2022) , 15, 1096. DOI:10.3390/ph15091096;	4,8	https://doi.org/10.3390/ph15091096
5	Jayathirtha, M.; Jayaweera, T.; Whitham, D.; Sullivan, I.; Petre B.A.* ; Darie, C.C.; Neagu, A.-N. “Two-Dimensional-PAGE Coupled with nLC-MS/MS-Based Identification of Differentially Expressed Proteins and Tumorigenic Pathways in MCF7 Breast Cancer Cells Transfected for JTB Protein Silencing.” <i>Molecules</i> , 2023 , 28, 7501. DOI:10.3390/molecules28227501	4,6	https://doi.org/10.3390/molecules28227501
6	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, <i>Molecules</i> (2022) , 27, 6196. DOI:10.3390/molecules27196196;	4,6	https://doi.org/10.3390/molecules27196196
7	EJ. Dupree, M. Jayathirtha, H Y., B.-A. Petre* , M. Mihasan, C. C. Darie, “A critical review of bottom-up proteomics: the good, the bad, and the future of this field”, <i>Proteomes</i> , (2020) , 8(14), DOI:10.3390/proteomes8030014;	3,6	https://doi.org/10.3390/proteomes8030014
8	R. Ionita, P. A. Postu, G. J. Beppe, M. Mihasan, B.A. Petre* , M. Hancianu, O. Cioanca, L. Hritcu, “Cognitive-enhancing and antioxidant activities of the aqueous extract from Markhamia tomentosa (Benth.) K. Schum. stem bark in a rat model of scopolamine”, <i>Behavioral and Brain Functions</i> , (2017), 13:5, DOI:10.1186/s12993-017-0123-6;	3,3	https://doi.org/10.1186/s12993-017-0123-6
9	Medjour, A., Petre, B.A* , Hammadi, M., Salhi, I., Dbara, M. and Hamidechi, M.A. (2024), Impact of breeding system transition on camel milk caseins. <i>Int J Dairy Technol</i> , 77: 813-826, DOI:10.1111/1471-0307.13075;	2,8	https://doi.org/10.1111/1471-0307.13075
10	P.A. Postu, L. Ion, G. Drochioiu, B.A. Petre* , and M. O. Glocker, “Mass Spectrometric Characterization of the Zein Protein Composition in Maize Flour Extracts upon Protein Separation by SDS-PAGE and 2 D Gel Electrophoresis”, <i>Electrophoresis</i> , (2019), 40, 2747–2758, DOI: 10.1002/elps.201900108;	2,5	https://doi.org/10.1002/elps.201900108
11	Darie-Ion, A. Neamtu, R. Iliescu, B.A. Petre* , Immuno-Affinity Study of Oxidative Tyrosine Containing Peptides, 2022, <i>International Journal of Peptide Research and Therapeutics</i> (2022) 28:41, DOI:10.1007/s10989-021-10329-2;	2,4	https://doi.org/10.1007/s10989-021-10329-2
12	Jung, J. E., Cárdenas V., Petre BA* , “Epitope identification of a Lys63 linkage ubiquitin antibody by mass spectrometric epitope excision and extraction approaches.” <i>Eur. J. Mass Spectrom.</i> , (2023) , DOI:10.1177/14690667231199012;	0,8	https://doi.org/10.1177/14690667231199012
13	Jureschi, M., Humelnicu, I., Petre, B. A* , Ciobanu, C. I., Murariu, M., Drochioiu, G. Solid phase synthesis of four analogs of amyloid- β (9-16) peptide: MS and FT-IR characterization. <i>Rev. Roum. Chim.</i> , (2019), 64(5), 433-443, DOI:10.33224/rrch.2019.64.5.07;	0,6	https://revroum.lew.ro/wp-content/uploads/2019/05/Art%2007.pdf
14	Lupaescu, A. V., Ciobanu, C. I., Humelnicu, I., Petre, B. A* , Murariu, M., Drochioiu, G., Design and synthesis of new anti-amyloid NAP-based/like peptides. <i>Rev. Roum. Chim.</i> , (2019), 64(6), 535-546, DOI:10.33224/rrch/2019.64.6.10;	0,6	https://doi.org/10.33224/rrch/2019.64.6.10
*conform actualizării Clarivate din 2025		Total	47,5

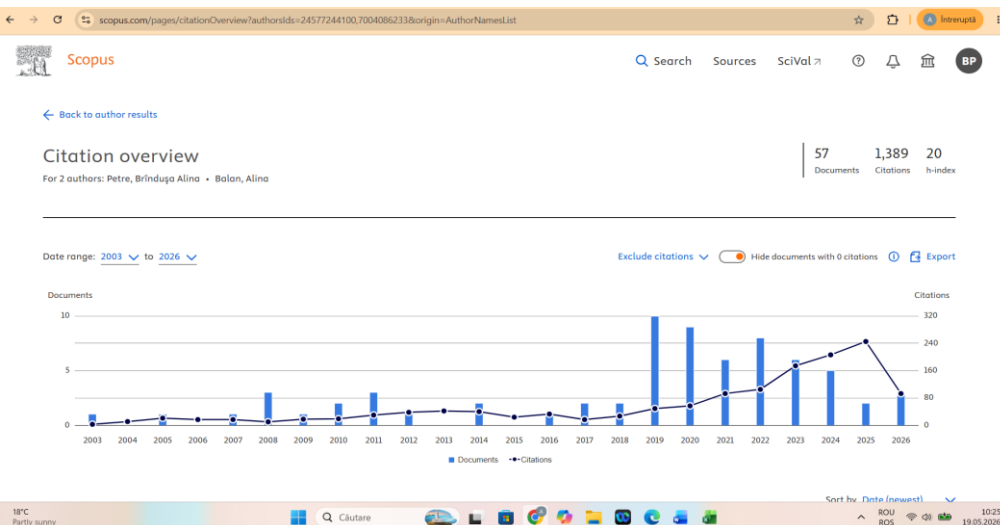
Dovada H-Index *

*autocitarile au fost excluse

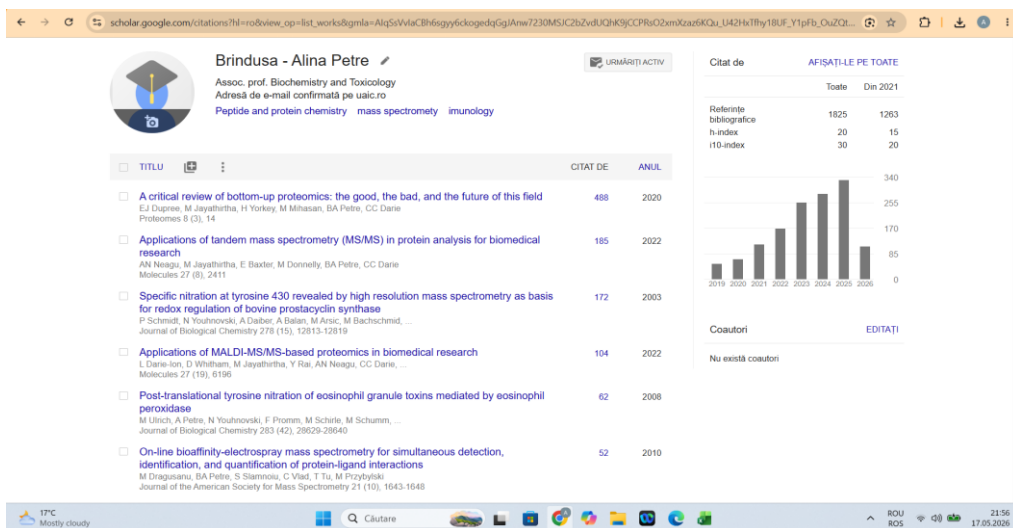
1.



2.



3.



Data: 08.06.2026

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