Curriculum Vitae

Informaţii personale **Brînduşa Alina Petre**

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EXPERIENŢA PROFESIONALĂ

02/2025 Afiliere IOSUD /Şcoala Doctorală de Chimie – UAIC. Susținerea tezei de abilitare – „Integration of Peptide and Protein Chemistry with Mass Spectrometry for Enhancing Structure-Function Understanding, 31 mai 2024.
Decizie de obținere a atestatului de abilitare și a calității de conducător de doctorat prin Ordinul Ministerului Nr. 7629/05.12.2024, Direcția Generală Învățământ Superior, din cadrul Ministerului Educației Naționale.

07/2021 - în prezent **Profesor asociat**, Departamentul de Chimie și Științe Biomoleculare, Universitatea Clarkson, Potsadam, NY, SUA

09/2020 - în prezent **Conferenţiar universitar**, Facultatea de Chimie,Universitatea Al. I. Cuza, Iasi, RO

- Disciplina Biochimie medicală -curs şi laborator
- DisciplinaToxicologie - curs şi laborator

11/2016 - în prezent **Cercetător ştiinţific (CSIII)**, Centrul TRANSCEND - Institutul Regional de Oncologie, Iasi

- Coordonator Laborator Proteomică

10/2014 - 08/2020 **Lector universitar**, Facultatea de Chimie, Universitatea Al. I. Cuza, Iasi, RO

- Disciplina Biochimie medicală - curs şi laborator
- Disciplina Biochimie descriptivă - laborator

09/2013 - 09/2014 **Asistent universitar**, Facultatea de Chimie,Universitatea Al. I. Iasi, RO

- Disciplina Biochimie şi Enzimologie - laborator
- Disciplina Acizi nucleici şi proteine - curs şi laborator

EDUCAŢIE

06/2010 - 03/2011
06/2008 - 08/2008 **Studii Postdoctorale** la NIH/NCRR Mass Spectrometry Resource,Washington University, St. Louis, MO, USA. *Conducator: Prof. Dr. Michael L. Gross*

07/2003 - 05/2008 **Studii Doctorale**, în cadrul "Laboratory of Analytical Chemistry and Biopolymer Structure Analysis", Departamentul de Chimie, Universitatea din Konstanz, Germania. *Conducator: Prof. Dr. Dr. h. c. Michael Przybylski*

Titlul tezei: "*Analytical Development and Biochemical Application of Mass Spectrometry in Combination with Immunoaffinity Methods for Identification and Structural Characterisation of Protein Nitration*"

09/2000 - 06/2002 **Studii de Master-** sectia Enzimologie şi Biotehnologie, "*Alexandru Ioan Cuza* " Universitatea Iasi, şi Laboratory of Analytical Chemistry and Biopolymer Structure Analysis,University of Konstanz, Titlul tezei: "*Isolation and structural characterisation of porin ion channel protein by electrophoretic and mass spectrometric methods*"

09/1996-06/2000 **Studii de Licenţă**, Facultatea de Chimie, Universitatea "*Alexandru Ioan Cuza*" din Iasi,Titlul tezei: "*Biosenzori amperometrici*"

Curriculum Vitae

ACTIVITĂȚI PROFESIONALE

2015 – 2018 **Vice președinte** al grupului de lucru STEM în cadrul Consorţiului universitar Coimbra Group

2018 – 2020 **Reprezentant** UAIC în cadrul grupului de lucru RSO (Research support officers)- Consorţiul universitar Coimbra Group

2021 - în prezent **Reprezentant** UAIC în cadrul grupului de lucru STEM – Consorţiul universitar Coimbra

2015 – 2020 **Coordonator ERASMUS**/ mobilităţi de practică în cadrul Facultăţii de Chimie

2024 - în prezent **Coordonator ERASMUS**/ mobilităţi de studiu, de practică şi de predare în cadrul Facultăţii de Chimie

2008 – 2011 **Cercetator asociat** în cadrul "Laboratory of Analytical Chemistry and Biopolymer Structure Analysis", Department of Chemistry, University of Konstanz; Germany

PROIECTE DE CERCETARE

2008 – 2011 **Director de proiect** "*Caracterizarea modificărilor proteinelor patofiziologice prin metode spectrometrice de masă de bio-afinitate*", UEFSCDI - CNCS România, (PN-II-RU-TE-2014-4-0920)

2015 - 2017 **Director de proiect**: "Noi abordari mass-Spectrometrice pentru elucidarea modificarilor oxidative in proteine", UEFSCDI-CNCS, (PN-II-RU-TE-2011-3- 0038),RO

03/2025 - 12/2027 **Membru în echipa proiectului** „Noi peptide penetrante pentru studiul interacțiunii receptorilor membranari cu liganzi dubli cu potential rol terapeutic in cancer", UEFSCDI, (PN-IV-P1-PCE-2023-0678)

03 - 12/2022 **Membru în echipa proiectului** "DECIDE- Dezvoltare prin educație antreprenorială și cercetare inovativă doctorală și postdoctorală", Universitatea "Ștefan cel Mare" din Suceava,RO

2020 - 2022 **Membru în echipa proiectului** "Conceperea de platforme peptidice moderne inspirate din lumea vie - Bio-PASCAL", UEFSCDI-RO, (PN-III-P2-2.1-PED-2019-2484);

2014 - 2017 **Membru în echipa proiectului** "Impact of heavy metal accumulation on the environment and productivity of forestry ecosystems: Non-conventional remediation technologies of contaminated forests", UEFSCDI -RO, (PN-II-PT-PCCA-2013-4-1149);

05 - 10/2014 **Membru în echipa proiectului** "Process for one-step production of two different high quality corn flours by non expensive screening and eco-friendly chemical separation (QUALIFARIN),Institute of Macromolecular Chemistry "Petru Poni" Iasi, Fundația Româno-Americană (RAF) – ARTIE-POC program;

2011 - 2014 **Membru în echipa proiectului** "Schimbări conformaționale induse de metale și pH ale peptidelor asociate cu patologiile neurodegenerative", UEFSCDI-CNCS RO (PN-II-ID-PCE-2011-3-0628);

2008 - 2012 **Membru în echipa proiectului** "Identifizierung und Struktur / Funktionsanalyse der Protein-Nitrierung in eosinophilen Granulozyten und in chronisch entzündetem murinem und humanem Lungengewebe", Fundația Germană de Cercetare (DFG), Universitatea din Konstanz, Germania

DISEMINARE ȘTIINȚIFICĂ SELECTATĂ*

1. Conferințele Institutului Regional de Oncologie Iași,22-25 noiembrie 2023; **B-A.Petre***, M.Jayathirtha, D. Whitham, C. Darie, Analiza proteomică a supraexpresiei proteinei jumping translocation breakpoint în linia celulară MCF7 a cancerului de sân - *prezentare orală*;
2. 2nd International Conferenceon Multi-omics Technologies for PrecisionMedicine, 20-21November 2023, Moscova, - online; L. Ion, D. Gheorghita, C. Bulei, C. Dimitriu, **B-A. Petre***, Mass spectrometry

and fluorimetry for Newborn Diagnosis of Lysosomal Storage Diseases -*prezentare orală*;

3. Clinical & Translational Omics Symposium, organizat de Segal Cancer Proteomics Centre, McGill University, 4-5 noiembrie 2023, Protaras, Cyprus; **A. Petre***, Newborn Diagnosis of Lysosomal Storage Diseases: A Mass Spectrometry Approach - *prezentare orală*;
4. 22nd Romanian International Conference on Chemistry and Chemical Engineering (RICCCE), Sinaia, Romania, 7-9 Septembrie 2022.; **B-A. Petre***, S.-C. Jitaru, L. Darie-Ion, , G. Drochioiu, R.-V. Gradinaru, The pH effect on self-assembly properties of a lysozyme-derived model peptide-*prezentare orală*;
5. Primul congres national ,,Noi valenţe ale medicinei moderne. Importanţa multidisciplinarităţii înasigurarea unui act medical de succes", 4-6 noiembrie 2022, Suceava; L. Ion, C. Dimitriu, M. Przybylski, **B.-A. Petre***, Determinarea activității enzimatice a unor boli de stocare lizozomale prin fluorimetrie şi spectrometrie de masă- *prezentare orală;*
6. International conference and xxxix scientific session of the romanian society for cell biology, (RSCB), 21- 23octombrie2022,Cluj-Napoca, **B. A. Petre***,L. Darie-Ion, R. Grădinaru, „Peptide-basedsubstrates for enzymes activity evaluation uzing mass spectrometry and fluorimetry - *prezentare orală;*
7. The 69th ASMS Conference on Mass Spectrometry and Allied Topics(ASMS), Philadelphia, USA. 31 October-4 November 2021; **B. A. Petre***, L. Darie-Ion, D. Belei, C. Darie and M. Przybylski - Enzymatic Activities Assay of Lysosomal Storage Diseases by Multiplex Mass Spectrometry - *poster TP 080;*
8. New trends in Biology: from molecules to complex systems, Iași, RO- online, 28 - 29 October 2021 - L. Darie-Ion, G. Drochioiu, C. C. Darie, **B. A. Petre*** - "Mass Spectrometric Characterization of the Zein Protein Composition in Maize Flour „Eco- Friendly" Extracts" - *prezentare orală;*
9. 21st Romanian International Conference on Chemistry and Chemical Engineering, 4-7 septembrie 2019, Constanta; L. Ion, C. Dimitriu, M.Przybylski, **B. A. Petre***,Clinical Diagnostics of Lysosomal Storage Disorders using MRM-MS and FluorimetricApproaches - *prezentare orală;*
10. 67thASMS Conference on Mass Spectrometry, 2-6 iunie 2019, Atlanta, GE, USA,**B. A. Petre*,**LauraIon, Cristina Dimitriu, Stefan Maeser, Wolfgang Kleinekofort, Cosmin Bulei, Michael Przybylski -"Clinical Diagnostics of Lysosomal Storage Diseasesin DBS Using New Substrates by MRM-MS" - *Poster*

PROFILŞTIINŢIFIC

Competenţe ştiinţifice

- Chimist orientat în domeniul studiilor proteinelor/ peptidelor prin spectrometriei de masă.
- Peste15 ani de experiență în chimia proteinelor și proteomică, chimia peptidelor, folosind diferite tehnici de ionizare și analizoare de masă.
- Peste15 ani de experiență în tehnicile de separare a proteinelor (de exemplu, electroforeza în gel 1-D și 2-D, HPLC), imunoprecipitare, Western blotting și metode de digestie proteică chimică/ enzimatică.
- Abilitatea de a găsi, analiza și rezolva probleme științifice și tehnice.
- Precizie în activitatea științifică și raportare.
- Abilități excelente în comunicare și colaborare. Abilităţi de a lucra în echipe multidisciplinare și, deasemenea, abilități productive de lider.
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Afilieri în cadrulSocietăţilor ştiinţifice

- Societatea Română de Chimie (**SRCh**)
- Deutsche Gesellschaft für Massen spektrometrie (**DGMS**)
- American Society for Mass Spectrometry (**ASMS**)

- Affinity Mass Spectrometry Group

Burse şi stagii de cercetare/predare

- Mobilitate ERASMUS+ de predare la Universitatea din Konstanz, DE, (2024)
- Bursier Fulbright la Universitatea Clarkson, Potsdam, USA, (08 - 11/2022)
- Mobilitate EU-FTICR la Skoltech Scientific Park, Moscow, RU (09/2019)
- Mobilitate ERASMUS+ de predare la Clackson University, NY, USA, (05/2019)
- Bursa de cercetare "Steinbeis research stipend" la centrul de "Cercetare pentru biopolimeri" Russesheim am Mainz,DE; (03 - 05/2015)
- Bursa NSF la Universitatea Washington în St. Louis, MO, USA; (2010 - 2011)
- Bursa DAAD la Universitatea din Konstanz, Germania; (07- 08/2013)
- Bursieral Junior Academy for Young Scholars and Scientists, Heidelberg Academy of Sciences and Humanities, DE (2008-2010)
- Bursier DAAD la UniversitateaWashington din St. Louis, SUA; (2008)
- Bursă Socrates -Erasmus la Universitatea din Konstanz, DE, (2001-2002)

Premii

- Premiul pentru cea mai bună prezentare orală la conferința OPTM, Boston, SUA, (2008)
- Premiul pentru cel mai bun poster la conferința DGMS, DE (2009)
- Premiul pentru cel mai bun poster la cea de-a11-a Conferință pe tema Chimie de coloizi și de suprafață, Iași, RO (2013).
- Premiul pentru cea mai bună prezentare orală la Workshopul International, Russelsheim, DE
- Premiul„Daniel Danielopolu", Academia Română,Secţiune Științe Medicale Lucrarea premiată: Advancements of Mass Spectrometry in Biomedical Research – Co-autor (2019)

Membru în comitetul de organizare a manifestărilor ştiinţifice

- Annual International Conference of the Romanian Society of Biochemistry and Molecular Biology, 2019 – *co-organizator*
- Şcoala de vară internaţională :"*Proteomics from introduction to clinical applications" 2019, 2018, 2017 – organizator principal*
- 1st „Clinical &Translational Omics Symposium", sesiunea "Multi-omics Application", Protaras, Cyprus; 2023 - *co-organizator şi coordonator ştiinţific*
- *Şcoala de vară internaţională JASSY, UAIC- co-organizator şi coordonator ştiinţific al modulului Life Sciences; (2021 – 2024)*

Activităţi aditionale

Referent pentru jurnalele: *Journal of Peptide Science*, *Central European Journal of Chemistry ,European Journal of Mass spectrometry, ChemMedChem, Journal of proteomics, Mass spectrometry review, Pharmaceutics ,Molecules şi Acta Chemica Iaşi*

Data: 04/04/2025 *Conf. univ. dr. abil. Brindusa Alina PETRE*

Anexa I.1. Lista articole în ordinea descrescătoare a factorilor de impact:

Nr.crt.	Articolul
1	N. N. Condurache, I. Aprodu, L. Grigore-Gurgu, **B. A. Petre**, E. Enachia, G. Râpeanua, G. E. Bahrima, N. Stănciuc, Fluorescence spectroscopy and molecular modeling of anthocyanins binding to bovine lactoferrin peptides, ***Food Chemistry,***(**2020**), 318, 126508,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. https://doi.org/10.1016/j.ultsonch.2015.09.007
3	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, https://doi.org/10.3390/antiox9080768
4	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
5	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. https://doi.org/10.3390/ijms241914714
6	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. https://doi.org/10.3390/biom11121838
7	Grigore-Gurgu L, Crăciunescu O, Aprodu I, Bolea CA, Iosăgeanu A, **Petre BA**, 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. https://doi.org/10.3390/biom10101416
8	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; https://doi.org/10.3390/pharmaceutics15020371
9	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, https://doi.org/10.1111/jcmm.13299
10	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", ***Behavioral and Brain Functions,*** (**2017**), 13:5, https://doi.org/10.1186/s12993-017-0123-6
11	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. https://doi.org/10.1074/jbc.M801196200
12	Schmidt P., Youhnovski N., Daiber A., **Balan (Petre) A.**, Arsic M., Przybylski M. Ullrich V., "Specific nitration at tyrosine-430 revealed by high resolution mass spectrometry as basis for redox regulation of bovine prostacyclin synthase", ***J. Biol. Chem***, (**2003**), 278: 12813-12819. https://doi.org/10.1074/jbc.M208080200
13	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. https://doi.org/10.3390/gels10020086
14	Iavorschi, M.; Lupăescu, A.-V.; Darie-Ion, L.; Indeykina, M.; Hitruc, G.E.; **Petre, B.A.*** Cu and ZnInteractions with Peptides Revealed by High-Resolution Mass Spectrometry. ***Pharmaceuticals, (2022)***, 15, 1096. https://doi.org/10.3390/ph15091096
15	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. https://doi.org/10.3390/molecules28227501
16	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, 6196https://doi.org/10.3390/molecules27196196

17	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, https://doi.org/10.3390/molecules27082411	4,6
18	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, https://doi.org/10.1016/j.polymer.2021.124186	4,6
19	C. S. Mocanu, L. Darie-Ion, **B. A. Petre**, V. R. Gradinaru, G Drochioiu, A computational study of metal ions interaction with amyloid-b 1-42 peptide structure in hyperpyrexia: Implications for Alzheimer disease, ***Journal of King Saud University Science*** 34 (**2022**) 102184, https://doi.org/10.1016/j.jksus.2022.102184	3,8
20	Drochioiu G., Manea M., Dragusanu M., Murariu M., Dragan E.S., **Petre B.A.** Mezo G., Przybylski M., "Interaction of beta-amyloid (1-40) peptide with pairs of metal ions: An electrospray ion trap mass spectrometric model study", ***Biophysical Chemistry***, (**2009**), 144(1-2) 9-20. https://doi.org/10.1016/j.bpc.2009.05.008	3,8
21	Schreier V. N., Pethő L, Orbán E., Marquardt A., **Petre B.A.**, Mező G. and Manea M., "Protein expression profile of HT-29 human colon cancer cells after treatment with a cytotoxic daunorubicin-GnRH-III derivative bioconjugate", ***PLoS ONE***, (**2014**), 9(4):e94041 https://doi.org/10.1371/journal.pone.0094041	3,7
22	C. S. Mocanu, **B. A. Petre**, L. Darie Ion, G. Drochioiu, M. Niculaua, I. Stoica, M. Homocianu, L. E. Nita, and V. R. Gradinaru, Structural Characterization of a New Collagen Biomimetic Octapeptide with Nanoscale Self-assembly Potential: Experimental and Theoretical Approaches, **ChemPlusChem**, (**2021**), https://doi.org/10.1002/cplu.202100462	3,4
23	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. https://doi.org/10.3390/proteomes10040035	3,3
24	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", ***Proteomes, (2020)***, 8(14).https://doi.org/10.3390/proteomes8030014	3,3
25	Vlad C., Lindner K., Karreman C., Schildknecht S., Leist M., Tomczyk N., Rontree J., Langridge J., Danzer K., Ciossek T., **Petre A.**, Gross M., Hengerer B., Przybylski M. "Autoproteolytic Fragments are Intermediates in the Oligomerization- Aggregation of Parkinson's Disease Protein Alpha-Synuclein as Revealed by Ion Mobility Mass Spectrometry", ***ChemBioChem***(**2011**), 12(18):2740-4https://doi.org/10.1002/cbic.201100569	3,2
26	**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, ***J. Am. Soc. Mass Spectrom***, (**2012**), 23(11): 1831-1840. https://doi.org/10.1007/s13361-012-0461-4	3,2
27	M. Drăguşan, **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. https://doi.org/10.1016/j.jasms.2010.06.011	3,2
28	Tu T., Drăguşanu M., **Petre B.A.,** Rempel D., Przybylski M., Gross M., "Protein-peptide affinity determination using an H/D exchange dilution strategy: Application to antigen-antibody interactions", ***J. Am. Soc. Mass Spectrom.*** (**2010**), 21(10):1660-7. https://doi.org/10.1016/j.jasms.2010.03.030	3,2
29	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, https://doi.org/10.1002/elps.201900108	2,9
30	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**),https://doi.org/10.2174/1389203721666200726223336	2,8
31	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,https://link.springer.com/article/10.1007/s10989-021-10329-2; https://doi.org/10.1007/s10989-021-10329-2	2,5
32	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**), https://doi.org/10.1007/s10989-020-10048-0	2,5
33	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-amyloidal NAP-Like Peptides, ***Int.J. Peptide Research and Therapeutics***, (**2019**), *25, 303-309https://doi.org/10.1007/s10989-018-9672-2*	2,5
34	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**),	2,3

	29:e4675. https://doi.org/10.1002/jms.4675	
35	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. https://doi.org/10.1002/psc.1298	2,1
36	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, https://doi.org/10.1002/rcm.9121	2,0
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Anexa I.2. Valorile Indicelui Hirsh (data 04.04.2025)

Scopus - 17,
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