

Listă de lucrări științifice

I. Articole științifice publicate în reviste cotate Web of Science cu factor de impact

1. Schmidt P., Youhnovski N., Daiber A., **Balan (Petre) A.**, Arsic M., Przybylski M. Ullrich V. (2003), Specific nitration at tyrosine-430 revealed by high resolution mass spectrometry as basis for redox regulation of bovine prostacyclin synthase, J. Biol. Chem, 278: 12813-12819.
2. **Petre B.A.**, Youhnovski N., Lukkari J., Weber R., Przybylski M. (2005), Structural Characterisation of tyrosine-nitrated peptides by ultraviolet and infrared matrix-assisted laser desorption/ionization Fourier transforms ion cyclotron resonance mass spectrometry, Eur. J. Mass Spectrom. 11, 513-518.
3. Drochioiu, G., Murariu, M., **Petre B.A.**, Manea, M., Przybylski, M (2007). Sinteza si caracterizarea unei nonapeptide cu proprietati specifice de legare a cuprului, Rev. Chim Bucharest, Romania 58 (3) 311-315.
4. 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 (2008), Post-translational tyrosine nitration of eosinophil granule toxins mediated by eosinophil peroxidase , J. Biol. Chem. 283 (42): 28629-28640.
5. Drochioiu G., Manea M., Dragusanu M., Murariu M., Dragan E.S., **Petre B.A.** Mezo G., Przybylski M., (2009), Interactions of A β 1-40 peptide with metal ions: an electrospray ion trap mass spectrometric approach, Biophysical Chemistry 144(1-2) 9-20.
6. Tu T., Drăgușanu M., **Petre B.A.**, Rempel D., Przybylski M., Gross M. (2010) Protein-peptide affinity determination using an H/D exchange dilution strategy: Application to antigen-antibody interactions, J. Am. Soc. Mass Spectrom. 21(10):1660-7.
7. M. Drăgușan, **B.A Petre**, S. Slămnoiu, T. Tu, M. Gross, M. Przybylski (2010) Online bioaffinity–electrospray mass spectrometry for structure identification and quantification of protein-ligand interactions, J. Am. Soc. Mass Spectrom. 21(10): 1643-8.
8. Bernevic B., **Petre B.A.**, Galetskiy D., Werner C., Wicke M., Schellander K., Przybylski M. (2011), Degradation and oxidation postmortem of myofibrillar proteins in porcine skeleton muscle revealed by high resolution mass spectrometric proteome analysis, Int. J. Mass Spectrom. 305 (2-3):217-227 .

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9. Dragusanu M., **Petre B.A.**, Przybylski M. (2011), Epitope motif of an anti-nitrotyrosine antibody specific for nitrotyrosine- modified peptides revealed by affinity-mass spectrometry, *J. Pept. Sci.* 17(3): 184-191.
10. 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. (2011), Autoproteolytic Fragments are Intermediates in the Oligomerization- Aggregation of Parkinson's Disease Protein Alpha-Synuclein as Revealed by Ion Mobility Mass Spectrometry, *ChemBioChem* 12(18):2740-4.
11. **Petre B.A.**, Ulrich M., Stumbaum M., Bernevic ., Moise A., Döring G., Przybylski M. (2012), When is Mass Spectrometry Combined with Affinity Approaches Essential? A Case Study of Tyrosine Nitration in Proteins, *J. Am. Soc. Mass Spectrom*, 23(11): 1831-1840.
12. Schreier V. N., Pethő L, Orbán E., Marquardt A., **Petre B.A.**, Mező G. and Manea M. (2014), Protein expression profile of HT-29 human colon cancer cells after treatment with a cytotoxic daunorubicin-GnRH-III derivative bioconjugate, *PLOS ONE*, 9(4):e94041.
13. Petre, B.A. (2014), Affinity – mass spectrometry approaches for elucidating structures and interactions of protein – ligand complexes in “Advancements of Mass Spectrometry in Biomedical Research”, Eds. Alisa G. Woods & Costel C. Darie, *Advances in Experimental Medicine and Biology Series* (ISSN: 0065-2598), *Springer* – in press.
14. Lindner K., Vlad C., Pierson N., Zhang Y, Karreman C., Schildknecht S., Leist M., Hengerer B, Petre B-A., Gross M.L., Clemmer D., Przybylski M. (2015), Ion Mobility- and HDX- Mass spectrometry differentiate fragmentation and aggregation in physiological and pathophysiological synucleins by the key tripeptide VVT(70-72), *Meth. Struct. Proteomics* – **under revision**

II. Capitoale de carte publicate în edituri din străinătate

1. **Petre B.A.**, Drăgușanu M., Przybylski M. (2008) Molecular recognition specificity of anti-3-nitrotyrosine antibodies revealed by affinity- mass spectrometry and immunoanalytical methods in: “Applications of Mass Spectrometry in Life Sciences”, *Springer* - ISBN 978-1-4020-8811-7, page 55-67.
2. Vrinceanu N., Petre B.A., Hristodor C. M., Popovici E., Pui A., Coman D. and Tanasa D. (2013), Zinc Oxide — Linen Fibrous Composites: Morphological, Structural, Chemical, Humidity Adsorptive and Thermal Barrier Attributes in "Modern Surface Engineering Treatments", Ed. Aliofkhazraei M., *Intec* - ISBN 978-953-51-1149-8, page 21-44.