

Articole publicate / Published articles

1. Buimaga-Iarinca Luiza, Calborean Adrian, Electronic structure of the LL-cysteine dimers adsorbed on Au(111): a density functional theory study, *PHYSICA SCRIPTA*, volume 86, issue 3, Article Number: 035707, DOI: 10.1088/0031- 8949/86/03/035707, 2012;
2. Asandei Alina, Schiopu Irina, Iftemi Sorana, Mereuta Loredana, Luchian Tudor, Investigation of Cu²⁺ Binding to Human and Rat Amyloid Fragments A beta (1-16) with a Protein Nanopore, *LANGMUIR*, volume 29, issue 50, pp. 15634-15642, DOI: 10.1021/la403915t, 2013;
3. Loredana Mereuta, Mahua Roy, Alina Asandei, Jong Kook Lee, Yoonkyung Park, Ioan Andricioaei, Tudor Luchian, Slowing down single-molecule trafficking through a protein nanopore reveals intermediates for peptide translocation, *SCIENTIFIC REPORTS*, issue 4, article number 3885, pp. 1- 11, DOI 10.1038/srep03885, 2014;
4. Alina Asandei, Sorana Iftemi, Loredana Mereuta, Irina Schiopu, Tudor Luchian, Probing of Various Physiologically Relevant Metals: Amyloid-b Peptide Interactions with a Lipid Membrane-Immobilized Protein Nanopore, *JOURNAL OF MEMBRANE BIOLOGY*, vol. 247(6), pp. 523-530, DOI 10.1007/s00232-014-9662-z, 2014;
5. Loredana Mereuta, Alina Asandei, Chang Ho Seo, Yoonkyung Park, Tudor Luchian, Quantitative Understanding of pH- and Salt-Mediated Conformational Folding of Histidine-Containing, β -Hairpinlike Peptides, through Single-Molecule Probing with Protein Nanopores, *ACS Applied Materials & Interfaces*, vol. 6:15, pp. 13242–13256, dx.doi.org/10.1021/am5031177, 2014;
6. Alina Asandei, Mauro Chinappi, Jong-kook Lee, Chang Ho Seo, Loredana Mereuta, Yoonkyung Park, Tudor Luchian, Placement of oppositely charged aminoacids at a polypeptide termini determines the voltage controlled braking of polymer transport through nanometer-scale pores, *SCIENTIFIC REPORTS*, vol. 5, pg. 1-13, DOI 10.1038/srep10419, 2015;
7. Alina Asandei, Mauro Chinappi, Hee-Kyoung Kang, Chang Ho Seo, Loredana Mereuta, Yoonkyung Park, Tudor Luchian, Acidity-Mediated, Electrostatic Tuning of Asymmetrically Charged Peptides Interactions with Protein Nanopores, *ACS APPLIED MATERIALS & INTERFACES*, vol. 7, issue 30, pp. 16706 – 16714, DOI 10.1021/acsami.5b04406, 2015;
8. B. Zorila, Mihaela Bacalum, A. I. Popescu, M. Radu, Log-normal deconvolution of Laurdan fluorescence spectra - A tool to assess lipid membrane fluidity, *Romanian Reports in Physics*, Volume 68, issue 2, pp. 702-712, 2016;
9. Mihaela Bacalum, Bogdan Zorila, Mihai Radu, Investigating the anticancer activity of some cationic antimicrobial peptides in epithelial tumor cells, *Romanian Reports in Physics*, vol. 68, issue 3, pp. 1159-1169, 2016;
10. A. Asandei, Schiopu Irina, Chinappi Mauro, Seo Chang Ho, Park Yoonkyung, Luchian Tudor, Electroosmotic Trap Against the Electrophoretic Force Near a Protein Nanopore Reveals Peptide Dynamics During Capture and Translocation, *ACS APPLIED MATERIALS & INTERFACES*, Vol. 8, Issue 20, pp. 13166-13179, DOI: 10.1021/acsami.6b03697, 2016;
11. M. Temelie, C. Mustaciosu, M.L. Flonta, D. Savu, Cellular differentiation exacerbates radiation sensitivity in vitro in a human dopaminergic neuronal model, acceptat spre publicare October 2016 in revista *Romanian Reports in Physics*, ISSN 1221-1451, factor de impact pentru anul 2015 1,367.

Brevete nationale depuse

1. Cerere de brevet de inventie national nr. OSIM A/00869 / 26.11.2012, „Procedeu de obținere a markerului enzimatic acid 2,4-diclorofenoxiacetic-hexametilendiamin-peroxidaza”, autori: Dorobantu Ioan, Neagu Livia;
2. Cerere de brevet de inventie national nr. OSIM A/00936/28.11.2013, ”Procedeu de obtinere a produsului acid 2,4-diclorofenoxi-amidopropilen-amido biotina”, autori: Dorobantu Ioan, Neagu Livia;
3. Cerere de brevet de inventie national nr. OSIM A00911/26.11.2014, ”Procedeu de obtinere a anticorpilor anti acid 2,4-diclorofenoxiacetic (2,4D) din amestecuri complexe de proteine pe baza de nanoimunosorbenti”, autori: Dorobantu Ioan, Neagu Livia;
4. Cerere de brevet de inventie national nr. OSIM A00885/25.11.2015, ”Procedeu de obtinere a markerului acid 2,4-diclorofenoxi-albumina serica de caprina-biotina utilizat in tehnica imunochimica in faza omogena pentru dozarea acidului 2,4-diclorofenoxiacetic (2,4-D) in probe biologice si de mediu”, autori: Dorobantu Ioan, Neagu Livia;
5. Cerere de brevet de inventie national cu nr. OSIM A00906/25.11.2016, cu titlul: ”Tehnica ELISA in faza omogena pe baza de nanoimunosorbenti de SiO₂ pentru detectia de pesticide organoclorurate din produse alimentare si de mediu”, Dorobantu Ioan, Neagu Livia.

National patent application

1. National patent application no. OSIM A/00869/26.11.2012, „Procedure of obtainment of the enzymatic marker 2,4-dichlorophenoxyacetic acid-hexamethylendiamin-peroxidase”, Dorobanțu Ioan, Neagu Livia;
2. National patent application no. OSIM A/00936/28.11.2013, „Procedure of obtainment of the product 2,4-dichlorophenoxy acid-amidopropylene-amido biotin”, Dorobanțu Ioan, Neagu Livia;
3. National patent application no. OSIM A 00911/26.11.2014, "Procedure of obtainment of anti acid 2,4-dichlorophenoxyacetic (2,4D) antibodies from protein mixture complex based on nanoimmunosorbents ", Dorobantu Ioan, Neagu Livia;
4. National patent application no. OSIM A00885/25.11.2015, " Procedure of obtainment of the marker 2,4-dichlorophenoxyacetic acid-goat serum albuminebiotin used in the immunochemical technique in homogenous phase for dosing of 2,4 dichlorophenoxyacetic acid (2,4-D) from biological and environmental samples”, Dorobantu Ioan, Neagu Livia;
5. National patent application no. OSIM A00906/25.11.2016, Homogenous ELISA technique based on SiO₂ nanoimmunosorbents for detection of organochlorinated pesticides from alimentary and environmental samples”, Dorobantu Ioan, Neagu Livia.