

Anexa 2a

Titlu proiect: RATIONAL DESIGN AND GENERATION OF SYNTHETIC, SHORT ANTIMICROBIAL PEPTIDES. LINKING STRUCTURE TO FUNCTION. (BIOPEP)

Categoria de proiect: PNCDI II- parteneriate-Subprogram Proiecte colaborative de cercetare aplicativa

Parteneri:

(P1) Institutul Național de Cercetare-Dezvoltare pentru Tehnologii Izotopice și Moleculare, Cluj Napoca

(P2) Institutul Național pentru Fizică și Inginerie Nucleară Horia Hulubei, Magurele

(P3) Universitatea Babeș-Bolyai, Cluj Napoca

Contractul de finanțare: 123/ 1.08.2012

Manager proiect: Tudor LUCHIAN

Lista rezultate

Nr. crt.	NUME AUTORI	TITLUL ARTICOLULUI/ CĂRȚII / COMUNICĂRII ȘTIINȚIFICE	REVISTA / VOLUMUL/EDITURA IN CARE A APARUT / CONFERINȚA LA CARE S-A COMUNICAT	ANUL PUBLICĂRII/ COMUNICĂRII
ARTICOLE ISI				
1	Mihaela Bacalum, Bogdan Zorila, Mihai Radu	Fluorescence spectra decomposition by asymmetric functions: Laurdan spectrum revisited	Analytical Biochemistry 440, 123-129	2013
2	Mihaela Bacalum, Bogdan Zorila, Mihai Radu, Aurel Popescu	Laurdan solvatochromism: influence of solvent polarity and hydrogen bonds	Optoelectronics and Advanced Materials, Rapid communications 7(5-6), 456-460	2013
3	Alina Asandei, Irina Schiopu, Sorana Iftemi, Loredana Mereuta, Tudor Luchian	Investigation of Cu ²⁺ binding to human and rat amyloid fragments A β (1-16) with a protein nanopore	Langmuir 29(50), 15634- 15642	2013
4	Ioan Turcu and Mihaela Mic	Size dependence of molecular self-assembling in stacked aggregates. II. Heat exchange effects	J. Physical Chemistry B 117(30), 9083–9093	2013
5	Loredana Mereuta, Roy Mahua, Asandei Alina, 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 (Nature Publishing Group) 4: 3885	2014
6	Daniel Marconi, Alia Ungurean	The effect of substrate temperature on structural and morphological properties of	Applied Surface Science 288, 166-171	2014

		Au/Si(111) thin films		
7	Sorana Iftemi, Marta De Zotti, Fernando Formaggio, Claudio Toniolo, Lorenzo Stella, Tudor Luchian	Electrophysiology investigation of trichogin GA IV activity in planar lipid membranes reveals ion channels of well-defined size	Chemistry & Biodiversity 11(7), 1069-1077	2014
8	Iftemi, S.; De Zotti, M.; Formaggio, F.; Toniolo, C.; Stella, L.; Luchian, T.	Trichogin GA IV forms ion channels of well-defined size in planar lipid membranes	JOURNAL OF PEPTIDE SCIENCE Volume: 20 Pages: S274-S274	2014
9	Alina Asandei, Sorana Iftemi, Loredana Mereuta, Irina Schiopu, Tudor Luchian	Probing of Various Physiologically Relevant Metals: Amyloid- β Peptide Interactions with a Lipid Membrane-Immobilized Protein Nanopore	J. Membrane Biology 247(6), 523-530	2014
10	Loredana Mereuta, Alina Asandei, Chang Ho Seo, Yoonkyung Park, and Tudor Luchian	Quantitative Understanding of pH- and Salt-Mediated Conformational Folding of Histidine-Containing, β -Hairpin-like Peptides, through Single-Molecule Probing with Protein Nanopores	ACS Applied Materials & Interfaces 6(15), 13242–13256	2014
11	Bogdan Zorila, Mihaela Bacalum, Aurel I. Popescu, Mihai Radu	Log-Normal Deconvolution of Laurdan, Fluorescence Spectra - A Tool To Assess Lipid Membrane Fluidity	Romanian Reports in Physics, accepted	2014
12	Mihaela Temelie, Diana Savu, Nicoleta Moisoi, Maria Luiza Flonta	Multiple Cellular Functions of PINK1, a Key Mitochondrial Kinase in Parkinson's Disease	Romanian Journal of Biophysics 24(3), 000-000	2014
13	Irina Schiopu, Sorana Iftemi, Tudor Luchian	Nanopore investigation of the stereoselective interactions between Cu ²⁺ and D,L-histidine amino acids engineered into an amyloidic fragment analogue	Langmuir 31(1), 387-396	2015
14	Alina Asandei, Mauro Chinappi, Jong-kook Lee, Chang Ho Seo, Loredana Mereuta, Yoonkyung Park, Tudor Luchian	Placement of oppositely charged amino acids at a polypeptide terminus determines the voltage-controlled braking of polymer transport through nanometer-scale pores	Scientific Reports (Nature Publishing Group) 5:10419	2015
15	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 7(30), 16706-16714	2015
16	Mauro Chinappi, Tudor Luchian, Fabio Cecconi	Nanopore tweezers: Voltage-controlled trapping and releasing of analytes	Physical Review E 92, 032714	2015
17	Mihaela Bacalum, Mihai Radu	Cationic Antimicrobial Peptides Cytotoxicity on	International Journal of Peptide Research and	2015

		Mammalian Cells: An Analysis Using Therapeutic Index Integrative Concept	Therapeutics 21(1), 47-55	
18	Diana Savu, Ileana Petcu, Mihaela Temelie, Cosmin Mustaciosu, Nicoleta Moiso	Compartmental stress responses correlate with cell survival in bystander effects induced by the DNA damage agent, bleomycin	Mutation Research/Fundamental and Molecular Mechanisms of Mutagenesis 771, 13-20	2015
19	Mihaela Bacalum, Bogdan Zorila, Mihai Radu	Investigating the anticancer activity of some cationic antimicrobial peptides in epithelial tumor cells	Romanian Reports in Physics, acceptat	2015
20	Alia Colnita, Daniel Marconi & Ioan Turcu	Fabrication of Interdigitated Electrodes Using Molecular Beam Epitaxy and Optical Lithography	Anal. Lett., acceptat, DOI: 10.1080/00032719.2015.1033719	2015
21	Daniel Marconi, Alia Colnita & Ioan Turcu	The Influence of Deposition Rate on the Structure and Morphology of Gold/Silicon(111) Growth by Molecular Beam Epitaxy	Anal. Lett., acceptat, DOI: 10.1080/00032719.2015.1022823	2015
22	Codruta C. Paraschivescu, Niculina D. Hadade, Anca G. Coman, Arnaud Gautier, Federico Cisnetti, Mihaela Matache	Symmetrical and non-symmetrical 2,5-diaryl-1,3,4-oxadiazoles: synthesis and photophysical properties	Tetrahedron Letters 56(25), 3961-3964	2015
23	Maria Adriana Acasandrei, Mihaela Temelie, Adina Boldeiu, Banu Melania, Ileana Petcu, Ana-Maria Morosanu, Mirancea Nicolae, Monica Simion, Diana Savu	Study of toxicity induced by zinc oxide nanoparticles on L929 and HepG2 cell lines	Toxicology and Applied Pharmacology (under evaluation)	2015
24	Alina Asandei, Irina Schiopu, Mauro Chinappi, Chang Ho Seo, Yoonkyung Park, Tudor Luchian	Electroosmotic Trap Against the Electrophoretic Force Near a Protein Nanopore Reveals Peptide Dynamics During Capture and Translocation	ACS Applied Materials & Interfaces 8(20), 13166-13179	2016
25	Mihaela Bacalum, Bogdan Zorila, Mihai Radu	Investigating the anticancer activity of some cationic antimicrobial peptides in epithelial tumor cells	Romanian Reports in Physics 3(68), 1159-1169	2016
26	Bogdan Zorila, Mihaela Bacalum, Mihai Radu, Aurel Popescu	Log-normal deconvolution of Laurdan fluorescence spectra - A tool to assess lipid membrane fluidity	Romanian Reports in Physics 2(68), 702-712	2016
27	Mihaela Temelie, Ileana Mihaela Petcu, Cosmin Catalin Mustaciosu, Iulia Diana Savu, Daniela Stroe, Nicoleta Moiso	Bystander effects and compartmental stress response to X-ray irradiation in L929 cells	Radiation and Environmental Biophysics 3(55), 371-379	2016
28	Mihaela Temelie,	Cellular differentiation	Romanian Reports in	2016

	Cosmin Catalin Mustaciosu, Maria Luiza Flonta, Iulia Diana Savu,	exacerbates radiation sensitivity in vitro in a human dopaminergic neuronal model	Physics, accepted)	
CARTI				
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DOCUMENTATIE TEHNICA, BREVETE				
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COMUNICARI STIINTIFICE NATIONALE				
1	Irina Schiopu, Loredana Mereuta, Alina Asandei, Tudor Luchian	Analysis of copper binding induced peptide folding through a nanopore sensing technique	12th National Conference on Biophysics, with international participation, , Iasi, Romania (oral presentation)	13-16th June 2013
2	Liliana Chiribasa, Irina Schiopu, Tudor Luchian	Melittin affinity enhancement through a dipole potential modifying agent	12th National Conference on Biophysics, with international participation, , Iasi, Romania (poster presentation)	13-16th June 2013
3	Daniela Ciumac, Loredana Mereuta, Aurelia Apetrei and Tudor Luchian	Physicochemical characteristics of the medium which guide peptide translocation through protein pores	12th National Conference on Biophysics, with international participation, , Iasi, Romania (poster presentation)	13-16th June 2013
4	Sorana Iftemi, Alina Asandei, Tudor Luchian	Single molecular investigation of conformational changes induced by copper or zinc metal ions upon truncated amyloid beta of human origin	12th National Conference on Biophysics, with international participation, , Iasi, Romania (poster presentation)	13-16th June 2013
5	Mihaela Bacalum, Nick Smisdrom, Aurel Popescu, Mihai Radu, Marcel Ameloot	A Microfluorimetric Study of The Membrane Organization of Model and Natural Membranes Using Laurdan	12th National Conference on Biophysics, with international participation, , Iasi, Romania (oral presentation)	13-16th June 2013
6	Ioan Turcu, Mihaela Mic, Mircea Bogdan	Molecular self-assembly through π -stacking interactions	12th National Conference on Biophysics, with international participation, , Iasi, Romania (oral presentation - plenary talk)	13-16th June 2013
7	Bogdan Zorila, Mihaela Bacalum, Mihai Radu	Solvent effects and photophysical studies of polarity sensitive probe Laurdan	12th National Conference on Biophysics, with international participation, , Iasi, Romania (poster presentation)	13-16th June 2013
8	Alia Ungurean, Nicoleta Elena Mircescu, Nicolae Leopold, Dan Vodnar, Leontin David	Label-free bacteria detection using Raman spectroscopy	12th National Conference on Biophysics, with international participation, , Iasi, Romania (poster presentation)	13-16th June 2013
9	Ana-Maria Casian, Andreea Diac, Niculina	Fluorescent Cyclopenta[c]pyrans with	"Zilele Academice Iesene", a XXIV-a Sesiune de	3-5 October 2013

	Hadade, Elena Bogdan, Ion Grosu	Biological Properties and Antimicrobial Peptides	Comunicari Stiintifice a Institutului de Chimie Macromoleculara "Petru Poni", MACRO IASI 2013, , Iasi, Romania (oral presentation)	
10	Liliana Chiribasa, Irina Schiopu, Tudor Luchian	The modulatory effects exerted by electrical properties of lipid membranes and ionic strength upon peptides - biomimetic systems interactions	a XLII-a Conferinta Nationala: Fizica si Tehnologiile Educationale Moderne, , Iasi, Romania (oral presentation)	25-27 October 2013
11	Daniela Ciumac, Tudor Luchian	The pH-dependent, single- molecule exploration of interactions between nanopores and peptides	a XLII-a Conferinta Nationala: Fizica si Tehnologiile Educationale Moderne, , Iasi, Romania (oral presentation)	25-27 October 2013
12	Daniela Ciumac, Liliana Chiribasa, Tudor Luchian	Sensing of aminoacids with ion channels	a XLII-a Conferinta Nationala: Fizica si Tehnologiile Educationale Moderne, , Iasi, Romania (poster presentation)	25-27 October 2013
13	Isabela Dragomir, Andreea Filip, Aurelia Apetrei, Loredana Mereuta	A lipid-protein system useful for the study of biomolecules at the single-molecule level	43th National Conference FTEM, , Iasi, Romania (poster presentation)	16-17 May 2014
14	Isabela Dragomir, Aurelia Apetrei	Influenta tariei ionice asupra interactiunii dintre peptide cationice si porul proteic de α - hemolizina	FARPHYS 2014, , Iasi, Romania (poster presentation)	25 October 2014
15	Andreea Filip, Loredana Mereuta	Biosenzori moleculari utilizati in detectia unor peptide antimicrobiene	FARPHYS 2014, , Iasi, Romania (poster presentation)	25 October 2014
16	Schiopu Irina, Iftemi Sorana, Apetrei Aurelia, Luchian Tudor	Nanopore-based assay for chiral recognition by metals	13th National Conference on Biophysics CNB 2015, with International Participation, , Timisoara, Romania (oral presentation)	June 4-6, 2015
17	Sorana Iftemi, Marta de Zotti, Fernando Formaggio, Claudio Toniolo, Lorenzo Stella, Tudor Luchian	Electrophysiology studies of Trichogin GA IV activity in reconstituted planar lipid membranes	13th National Conference on Biophysics CNB 2015, with International Participation, , Timisoara, Romania (poster presentation)	June 4-6, 2015
18	Alina Asandei, Loredana Mereuta, Tudor Luchian	Braking of peptide passage across nanopores with oppositely charged aminoacids at the peptide termini	13th National Conference on Biophysics CNB 2015, with International Participation, , Timisoara, Romania (poster presentation)	June 4-6, 2015
19	Mihaela Bacalum, Florina Zorila	Therapeutic potential of de novo synthesized antimicrobial peptides	13th National Conference on Biophysics CNB 2015, with International Participation, , Timisoara, Romania (oral presentation)	June 4-6, 2015

20	Ioan Dorobantu, Livia Neagu, Mihaela Bacalum, Cristina Ionescu, Cristian Ion, Antoniu Moldovan	Obtaining of nanoimmunisorbent SiO ₂ -2,4dichlorophenoxyacetic acid and its physico-chemical characterization	13th National Conference on Biophysics CNB 2015, with International Participation, , Timisoara, Romania (poster presentation)	June 4-6, 2015
21	Bogdan Zorila, Mihaela Bacalum, Aurel Popescu	Study of the interaction between antimicrobial peptides and model cell membranes by time resolved fluorescence	13th National Conference on Biophysics CNB 2015, with International Participation, , Timisoara, Romania (poster presentation)	June 4-6, 2015
22	Maria-Cristina Pașcanu, Niculina D. Hadade, Ion Grosu	Cyclic peptides: Synthesis and Binding Properties	Zilele Academice Ieșene, A XXV-a sesiune de comunicari stiintifice "Progrese in știința compușilor organici si macromoleculari", , Iasi, Romania (poster presentation)	24-26 Septembrie 2015
23	Alia Colnița, Nicoleta Elena Dina, Dan Vodnar, Nicolae Leopold, Diana Bogdan, Leontin David, Ioan Turcu	Differentiation of Gram-positive bacteria using vibrational spectroscopies and Principal Component Analysis	13th National Conference on Biophysics CNB 2015, with International Participation, , Timisoara, Romania (poster presentation)	June 4-6, 2015
24	Lorant Janosi, Ioan Turcu	Mechanisms of Interaction of Short Arginine-, Tryptophan- and Histidine-Based Antimicrobial Peptides with Lipid Membranes	13th National Conference on Biophysics CNB 2015, with International Participation, , Timisoara, Romania (oral presentation)	June 4-6, 2015
25	Irina Schiopu, Alina Asandei, Loredana Mereuta, Sorana Elena Ifemi, Tudor Luchian	Effect of copper on amyloid-like peptides misfolding	The 14th National Conference of Biophysics, , Cluj-Napoca, Romania (poster presentation)	02 – 04 June 2016
26	Alina Asandei, Loredana Mereuta, Tudor Luchian	Study of Peptide Conformational Changes at Single-Molecule Level using a protein nanopore	The 14th National Conference of Biophysics, , Cluj-Napoca, Romania (poster presentation)	02 – 04 June 2016
27	Mihaela Bacalum, Nick Smisdom, Marcel Ameloot	A New BODIPY Probe for Lipid Membranes	The 14th National Conference of Biophysics, , Cluj-Napoca, Romania (oral presentation)	02 – 04 June 2016
28	Bogdan Zorila, Mihaela Bacalum	The development and applications of a simple fluorescence lifetime spectrometer	The 14th National Conference of Biophysics, , Cluj-Napoca, Romania (poster presentation)	02 – 04 June 2016
29	Alia Colnita, Daniel Marconi, Radu Tiberiu Bratfalean, Ioan Turcu,	Fabrication of Nanostuctured, Homoepitaxial Silicon Films for Biosensing Application	The 14th National Conference of Biophysics, , Cluj-Napoca, Romania (poster presentation)	02 – 04 June 2016
30	Daniel Marconi, Alia Colita, Bogdan Cozar, Ioan Turcu	Epitaxial Growth of Nanometer-sized FePc on Au/Si (111) Substrate by Molecular Beam Epitaxy	The 14th National Conference of Biophysics, , Cluj-Napoca, Romania (poster presentation)	02 – 04 June 2016

		Method		
COMUNICARI STIINTIFICE INTERNATIONALE				
1	Irina Schiopu, Loredana Mereuta, Alina Asandei, Tudor Luchian	Copper(II) binding to a histidine - containing chimera peptide: a single protein nanopore study	FEBS Workshop, Biological Surfaces and Interfaces, Sant Feliu de Guixols, Catalonia, Spain (poster presentation)	30 June - 05 July 2013
2	Sorana Iftemi, M. De Zotti, F. Formaggio, C. Toniolo, L. Stella, and T. Luchian	Single-channel investigation of trichogin GA IV activity in reconstituted planar lipid membranes	FEBS Workshop, Biological Surfaces and Interfaces, Sant Feliu de Guixols, Catalonia, Spain (poster presentation)	30 June - 05 July 2013
3	Sorana Iftemi, Alina Asandei, Tudor Luchian	Molecular structure changes of A β 1-16 peptide induce by transition metals	9th European Biophysics Congress EBSA, Lisbon, Portugal (poster presentation)	13-17 July 2013
4	Mihaela Bacalum, Nick Smisdrom, Aurel Popescu, Mihai Radu, Marcel Ameloot	Correlating Laurdan fluorescence lifetime and generalized polarization in lipid membranes	9th European Biophysics Congress EBSA, Lisbon, Portugal (poster presentation)	13-17 July 2013
5	Luiza Buimaga-Iarinca, Cristian Morari	Self-assembly of cysteine on Au(110)-(1x1): a first principles study	9th European Biophysics Congress EBSA, Lisbon, Portugal (poster presentation)	13-17 July 2013
6	Maria-Cristina Pascanu, Niculina Hadade, Ion Grosu	Towards synthesis of new peptide-based cryptands	10th International Conference Students for Students, Cluj-Napoca, Romania (oral presentation)	10-14 April 2013
7	Daniel Marconi, Alia Ungurean, Radu Bratfalean	The influence of deposition rate on structural and morphological properties of gold thin films on Si(111)	International Conference on Processes in Isotopes and Molecules (PIM), Cluj-Napoca, Romania (poster presentation)	2013, 25-27 September
8	Alia Colnita, Daniel Marconi, Ioan Turcu	Fabrication of Interdigitated Electrodes Using Molecular Beam Epitaxy and Optical Lithography Techniques and Its Applications in Molecular Detection	3rd Ed. of International Conference on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences, IC-ANMBES, 2014, Brasov, Romania (oral presentation)	2014, June 13th-15th
9	Tudor Luchian, Loredana Mereuta, Irina Schiopu, Alina Asandei, Sorana Iftemi and Aurelia Apetrei	Nanosopic Interrogation of Molecular Interactions with Protein Nanopores	3rd Ed. of International Conference on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences, IC-ANMBES, 2014, Brasov, Romania (invited keynote presentation)	2014, June 13th-15th
10	Lorant Janosi, Attila Bende, Ioan Turcu	Molecular Interactions of Antimicrobial Peptides with Cell Membrane Models by Means of Molecular Modeling	3rd Ed. of International Conference on Analytical and Nanoanalytical Methods for Biomedical	2014, June 13th-15th,

			and Environmental Sciences, IC-ANMBES 2014, Brasov, Romania (oral presentation)	
11	Mihaela Mic, Adrian Pirnau, Mircea Bogdan, Ioan Turcu	Comparative Binding Affinity of Two General Anaesthetics to β -Cyclodextrin	3rd Ed. of International Conference on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences, IC-ANMBES 2014, Brasov, Romania (poster presentation)	2014, June 13th-15th,
12	Irina Schiopu, Alina Asandei, Sorana Iftemi, Loredana Mereuta, Liliana Chiribasa, Tudor Luchian	Single-Molecule Probing of Cu^{2+} Induced Folding on Human versus Rat Amyloid $\text{A}\beta(1-16)$ Fragments	3rd Ed. of International Conference on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences, IC-ANMBES 2014, Brasov, Romania (poster presentation)	2014, June 13th-15th,
13	Aurelia Apetrei and Tudor Luchian	Sequential Tracking of the Translocation Pathway of Short, Tryptophan Rich, Cationic Peptides through a Protein Pore with Non-Uniform Diameter	3rd Ed. of International Conference on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences, IC-ANMBES, 2014, Brasov, Romania (poster presentation)	2014, June 13th-15th
14	Loredana Mereuta, Alina Asandei, Daniela Ciumac, Tudor Luchian	Different Steps in Translocation of Peptides through a Protein Nanopore	3rd Ed. of International Conference on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences, IC-ANMBES 2014, Brasov, Romania (poster presentation)	2014, June 13th-15th,
15	Alina Asandei, Sorana Iftemi, Loredana Mereuta, Irina Schiopu and Tudor Luchian	Investigating the Affinity of Various Physiologically Relevant Metals to Human $\text{A}\beta(1-16)$ Peptides via Nanopore Sensing Techniques	3rd Ed. of International Conference on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences, IC-ANMBES 2014, Brasov, Romania (poster presentation)	2014, June 13th-15th,
16	Daniel Marconi, Alia Colnita and Ioan Turcu	The Effect of Substrate Temperature on Structural and Morphological Properties of Au/Si(111) Thin Films	3rd Ed. of International Conference on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences, IC-ANMBES 2014, Brasov, Romania (poster presentation)	2014, June 13th-15th,
17	Florina Zorila, Mihaela Bacalum	Substitution Of Tryptophan Residues With Histidin Induces A Decrease Of Antimicrobial Peptides	IC-ANMBES, 2014, Brasov, Romania (poster presentation)	2014 June 13th-15th

		Therapeutic Potential		
18	Bogdan Zorila, Mihaela Bacalum, Mihai Radu	Log-Normal Deconvolution of Laurdan Fluorescence Spectra-A Tool to Assess Lipid Membrane Fluidity	IC-ANMBES, 2014, Brasov, Romania (poster presentation)	2014 June 13th-15th
19	Alia Colnita, Nicoleta Dina, Dan Vodnar, Nicolae Leopold, Vasile Chis, Leontin David	Characterization of gram positive bacteria using Raman Spectroscopy	IC-ANMBES, 2014, Brasov, Romania (poster presentation)	2014 June 13th-15th
20	Maria-Cristina Pascanu, Niculina Hadade, Ion Grosu	Synthesis of new peptide-based cryptands	BOSS XIV – 14th Belgian Organic Synthesis Symposium, , Louvain-la-Neuve, Belgium. (poster presentation)	13-18 iulie 2014
21	Ana-Maria Casian, Niculina Hadade, Elena Bogdan, Ion Grosu	New Linear Fluorescent Antimicrobial Peptides	BOSS XIV – 14th Belgian Organic Synthesis Symposium, Louvain-la-Neuve, Belgium (poster presentation)	13-18 iulie 2014,
22	Ana-Maria Casian, Andreea Petronela Diac, Elena Bogdan, Niculina Hadade, Ion Grosu	Fluorescent Antimicrobial Peptides	International Conference “Students for Students” – the IXth edition, , Cluj-Napoca, Romania (oral presentation)	9-13 Aprilie 2014
23	Bacalum, M. Radu, M.	TGF- β effect on oligodendrocytes when subjected to cholesterol modulation factors	9th Fens Forum of Neuroscience, , Mico, Milan, Italy (poster presentation)	July 5-9, 2014
24	I. Schiopu, A. Asandei, S. Iftemi, L. Mereuta, T. Luchian	Copper determined beta-amyloid peptides misfolding: a single molecule assay	10th European Biophysics Congress, , Dresden, Germany (poster presentation)	July 18-22, 2015
25	Tudor Luchian, Loredana Mereuta, Irina Schiopu, Alina Asandei, Sorana Iftemi and Aurelia Apetrei	Nanosopic Interrogation of Molecular Interactions with Protein Nanopores	3rd Ed. of International Conference on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences, IC-ANMBES 2014, Brasov, Romania (invited keynote presentation)	2014, June 13th-15th,
26	Lorant Janosi, Attila Bende, Ioan Turcu	Molecular Interactions of Antimicrobial Peptides with Cell Membrane Models by Means of Molecular Modeling	3rd Ed. of International Conference on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences, IC-ANMBES 2014, Brasov, Romania (oral presentation)	2014, June 13th-15th
27	Mihaela Mic, Adrian Pirnau, Mircea Bogdan, Ioan Turcu	Comparative Binding Affinity of Two General Anaesthetics to β -Cyclodextrin	3rd Ed. of International Conference on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences, IC-ANMBES	2014, June 13th-15th

			2014, Brasov, Romania (poster presentation)	
28	Irina Schiopu, Alina Asandei, Sorana Iftemi, Loredana Mereuta, Liliana Chiribasa, Tudor Luchian	Single-Molecule Probing of Cu ²⁺ Induced Folding on Human versus Rat Amyloid A β (1-16) Fragments	3rd Ed. of International Conference on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences, IC-ANMBES, 2014, Brasov, Romania (poster presentation)	2014, June 13th-15th
29	Aurelia Apetrei and Tudor Luchian	Sequential Tracking of the Translocation Pathway of Short, Tryptophan Rich, Cationic Peptides through a Protein Pore with Non-Uniform Diameter	3rd Ed. of International Conference on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences, IC-ANMBES, 2014, Brasov, Romania (poster presentation)	2014, June 13th-15th
30	Loredana Mereuta, Alina Asandei, Daniela Ciumac, Tudor Luchian	Different Steps in Translocation of Peptides through a Protein Nanopore	3rd Ed. of International Conference on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences, IC-ANMBES, 2014, Brasov, Romania (poster presentation)	2014, June 13th-15th
31	Alina Asandei, Sorana Iftemi, Loredana Mereuta, Irina Schiopu and Tudor Luchian	Investigating the Affinity of Various Physiologically Relevant Metals to Human A β (1-16) Peptides via Nanopore Sensing Techniques	3rd Ed. of International Conference on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences, IC-ANMBES, 2014, Brasov, Romania (poster presentation)	2014, June 13th-15th
32	Daniel Marconi, Alia Colnita and Ioan Turcu	The Effect of Substrate Temperature on Structural and Morphological Properties of Au/Si(111) Thin Films	3rd Ed. of International Conference on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences, IC-ANMBES, 2014, Brasov, Romania (poster presentation)	2014, June 13th-15th
33	Florina Zorila, Mihaela Bacalum	Substitution Of Tryptophan Residues With Histidin Induces A Decrease Of Antimicrobial Peptides Therapeutic Potential	IC-ANMBES 2014, Brasov, Romania (poster presentation)	June 13th-15th, 2014
34	Bogdan Zorila, Mihaela Bacalum, Mihai Radu	Log-Normal Deconvolution of Laurdan Fluorescence Spectra-A Tool to Assess Lipid Membrane Fluidity	IC-ANMBES, 2014, Brasov, Romania (poster presentation)	2014 June 13th-15th
35	Alia Colnita, Nicoleta Dina, Dan Vodnar, Nicolae Leopold, Vasile Chis, Leontin David	Characterization of gram positive bacteria using Raman Spectroscopy	IC-ANMBES, 2014, Brasov, Romania (poster presentation)	2014 June 13th-15th

36	Maria-Cristina Pascanu, Niculina Hadade, Ion Grosu	Synthesis of new peptide-based cryptands	BOSS XIV – 14th Belgian Organic Synthesis Symposium, , Louvain-la-Neuve, Belgium, (poster presentation)	13-18 iulie 2014
37	Ana-Maria Casian, Niculina Hadade, Elena Bogdan, Ion Grosu	New Linear Fluorescent Antimicrobial Peptides	BOSS XIV – 14th Belgian Organic Synthesis Symposium, Louvain-la-Neuve, Belgium (poster presentation)	13-18 iulie 2014
38	Ana-Maria Casian, Andreea Petronela Diac, Elena Bogdan, Niculina Hadade, Ion Grosu	Fluorescent Antimicrobial Peptides	International Conference “Students for Students” – the IXth edition, , Cluj-Napoca, Romania (oral presentation)	9-13 Aprilie 2014
39	Bacalum, M. Radu, M.	TGF- β effect on oligodendrocytes when subjected to cholesterol modulation factors	9th Fens Forum of Neuroscience, , Mico, Milan, Italy (poster presentation)	July 5-9, 2014
40	I. Schiopu, A. Asandei, S. Iftemi, L. Mereuta, T. Luchian	Copper determined beta-amyloid peptides misfolding: a single molecule assay	10th European Biophysics Congress, , Dresden, Germany (poster presentation)	July 18-22, 2015
41	Alina Asandei, Loredana Mereuta, Tudor Luchian	Single-molecule investigation of peptide conformational changes with a protein nanopore	Gordon Research Conferences frontiers of science, Membrane Protein Folding, , Bentley University, Boston (poster presentation)	21-26 iunie 2015
42	Daniel Marconi, Alia Colnita, Maria Miclaus, Ioan Turcu	Fabrication of interdigitated electrodes by molecular beam epitaxy technique for molecular detection	10th European Biophysics Congress, Dresden, Germany (poster presentation)	July 18-22, 2015
43	A. Colnita, N. E. Dina, D. Vodnar, N. Leopold, L. David	The discrimination of Gram-positive bacteria using Raman and SERS spectroscopies	10th European Biophysics Congress, Dresden, Germany (poster presentation)	July 18-22, 2015
44	A Colnita, D.Marconi, Diana Bogdan, Silvia Neamțu, Flavia Martin, Ioan Turcu	Fabrication of interdigitated electrodes for molecular sensing applications	10th International Conference Processes in Isotopes and Molecules, , Cluj-Napoca, Romania (poster presentation)	23-25 Sept 2015
45	Daniel Marconi, Alia Colnita, Radu Tiberiu Bratfalean, Ioan Turcu	Fabrication of nanostructured silicon films for biosensing applications	10th International Conference Processes in Isotopes and Molecules, , Cluj-Napoca, Romania (poster presentation)	23-25 Sept 2015
46	Radu Tiberiu Bratfalean, Daniel Marconi, Alia Colnita, I. Turcu	Differentiation of Gram-positive bacteria using vibrational spectroscopies and Principal Component Analysis	10th International Conference Processes in Isotopes and Molecules, , Cluj-Napoca, Romania (poster presentation)	23-25 Sept 2015
47	Lorant Janosi, Loredana Mereuta, Tudor Luchian, Octav	Synthesis and investigation of novel small antimicrobial peptides	European Biotechnology Congress, Bucuresti, Romania (oral presentation)	2015, 07–09 May

	Caldararu, Mihaela Bacalum, Niculina Hadade, Ion Grosu, Ioan Turcu			
48	Lorant Janosi, Ioan Turcu	Interaction mechanisms of short ARG-TRP-HIS based antimicrobial peptides with membrane models	10th European Biophysics Congress, Dresden, Germany (poster presentation)	July 18-22, 2015
49	Lorant Janosi, Ioan Turcu	Mechanisms of Interaction of Short Cationic Antimicrobial Peptides with Lipid Membrane Models	10th International Conference Processes in Isotopes and Molecules, , Cluj-Napoca, Romania (oral presentation)	23-25 Sept 2015
50	Irina Schiopu, Sorana Elena Iftemi, Tudor Luchian	Probing The Key Metal Binding Residues In Mutant Amyloid Peptides	Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences (IC-ANMBES 2016), , Brasov, Romania (poster presentation)	29 June – 02 July 2016
51	Aurelia Apetrei, Tudor Luchian	Indirect Assessment of Antimicrobial Peptides Binding Affinity to Lipid bilayer via a Single Nanopore Sensing Technique	Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences (IC-ANMBES 2016), , Brasov, Romania (poster presentation)	29 June – 02 July 2016
52	Mihaela Bacalum	Antimicrobial Peptides Show Antitumor Activity Against SH-SY-5Y Human Neuroblastoma Cells	Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences (IC-ANMBES 2016), , Brasov, Romania (poster presentation)	29 June – 02 July 2016
53	Bogdan Zorila, Mihaela Bacalum	Study of the Interaction between Antimicrobial Peptides and Model Cell Membranes by Steady State and Time Resolved Fluorescence	Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences (IC-ANMBES 2016), , Brasov, Romania (poster presentation)	29 June – 02 July 2016
54	Mihaela Bacalum	Anticancer activity of antimicrobial peptides	The 16th International Balkan Workshop on Applied Physics and Materials Science (IBWAP 2016), Constanta, Romania (poster presentation)	07 – 09 July 2016
55	Lorant Janosi, Mihaela Bacalum, Mihai Radu, Florina Zorila, Ioan Turcu	The Effect of the 3D Hydrophobic Moment of Short ARG- and TRP-Based Peptides on Charged Membranes	Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences (IC-ANMBES 2016), , Brasov, Romania (poster presentation)	29 June – 02 July 2016
56	Livia Neagu, Ioan	Kynetic and Thermodynamic	Analytical and	29 June – 02

	Dorobanțu	Properties of the System Nanoimmunosorbent-Analyte (2,4-D) in the Presence of Enzymatic Label Used in Homogenous Elisa Technique for Detection of 2,4-D from Environmental and Alimentary Samples	Nanoanalytical Methods for Biomedical and Environmental Sciences (IC-ANMBES 2016), , Brasov, Romania (poster presentation)	July 2016
ATLASE, DICTIONARE DE SPECIALITATE				
1				
n				
ALTE PUBLICATII				
1				
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Lista achizițiilor realizate în cadrul proiectului

Denumire echipament	Categorie de achiziții*: (numai mijloace fixe)	Valoarea (lei)	Locație

Categorie de achiziții*:

1. Echipamente și aparatură de cercetare
2. Rețele de comunicații specializate
3. Baze de date și informații de specialitate
4. Echipamente și mijloace moderne de documentare și comunicare
5. Alte categorii

**Director proiect,
Prof. dr. Tudor Luchian**

