



ANEXA 1

FIȘĂ DE EVALUARE GENERALĂ A STANDARDELOR UNIVERSITĂȚII

CRITERII	DESCRIPTORI	PUNCTAJE ACORDATE
I. ACTIVITATEA DE CERCETARE (70%)	1. Articole științifice publicate <i>in extenso</i> în reviste cotate <i>Web of Science</i> cu factor de impact	(60 puncte x factor de impact + 25) / număr autori
	1. Aurelia Apetrei, Andrei Ciucă, Jong-kook Lee, Chang Ho Seo, Yoonkyung Park, Tudor Luchian, <i>A Protein Nanopore-Based Approach for Bacteria Sensing</i> , 2016, Nanoscale Research Letters 11:501	$(60 \times 2,584 + 25)/6 = 30,006$
	2. Aurelia Apetrei, Lucel Sîrghi, <i>Stochastic Adhesion of Hydroxylated Atomic Force Microscopy Tips to Supported Lipid Bilayers</i> , 2013, Langmuir 29(52), 16098-16104	$(60 \times 4,384 + 25)/2 = 144,020$
	3. Yeranddy Alpizar, Maarten Gees, Alicia Sanchez, Aurelia Apetrei, Thomas Voets, Bernd Nilius, Karel Talavera, <i>Bimodal effects of cinnamaldehyde and camphor on mouse TRPA1</i> , 2013, Pflügers Archiv-European Journal Of Physiology 465(6), 853-864	$(60 \times 3,073 + 25)/7 = 29,911$
	4. Irina Șchiopu, Loredana Mereuță, Aurelia Apetrei, Yoonkyung Park, Kyung-Soo Hahm, Tudor Luchian, <i>The role of tryptophan spatial arrangement for antimicrobial-derived, membrane-active peptides adsorption and activity</i> , 2012, Molecular BioSystems 8(11), 2860-2863	$(60 \times 3,350 + 25)/6 = 37,666$
	5. Alina Asandei, Aurelia Apetrei, Yoonkyung Park, Kyung-Soo Hahm, Tudor Luchian, <i>Investigation of Single-Molecule Kinetics Mediated by Weak Hydrogen Bonds within a Biological Nanopore</i> , 2011, Langmuir 27(1), 19-24	$(60 \times 4,186 + 25)/5 = 55,232$
	6. Alina Asandei, Aurelia Apetrei, Tudor Luchian, <i>Uni-molecular detection and quantification of selected beta-lactam antibiotics with a hybrid alpha-hemolysin protein pore</i> , 2011, Journal of Molecular Recognition 24(2), 199-207	$(60 \times 3,310 + 25)/3 = 74,533$



I. ACTIVITATEA DE CERCETARE (70%)	<p>7. W. Everaerts, M. Gees, Y. Alpizar, R. Farre, C. Lenten, Aurelia Apetrei, I. Dewachter, F. van Leuven, R. Vennekens, D. De Ridder, B. Nilius, T. Voets, K. Talavera, <i>The capsaicin receptor TRPV1 is a crucial mediator of the noxious effects of mustard oil</i>, 2011, Current Biology 21(4), 316-321</p>	$(60 \times 9,647 + 25) / 13 = 46,447$
	<p>8. Aurelia Apetrei, Alina Asandei, Yoonkyung Park, Kyung-Soo Hahm, Mathias Winterhalter, Tudor Luchian, <i>Unimolecular study of the interaction between the outer membrane protein OmpF from E. coli and an analogue of the HP(2–20) antimicrobial peptide</i>, 2010, Journal of Bioenergetics and Biomembranes 42(2), 172-180</p>	$(60 \times 3,637 + 25) / 6 = 40,536$
	<p>9. Aurelia Apetrei, Loredana Mereuță, Tudor Luchian, <i>The RH 421 styryl dye induced, pore model-dependent modulation of antimicrobial peptides activity in reconstituted planar membranes</i>, 2009, Biochimica et Biophysica Acta – General Subjects 1790(8), 809-816</p>	$(60 \times 2,958 + 25) / 3 = 67,493$
	<p><i>Factorul de impact al revistei a fost completat cu valoarea corespunzătoare anului publicării articolului, respectiv celui mai apropiat an în situația absenței valorii pentru anul în cauză (conform Thomson Reuters-Journal Citation Reports)</i></p>	Scor individual 1 525,844
	<p>2. Articole științifice publicate <i>in extenso</i> în reviste indexate fără factor de impact</p>	Scor individual 2 0
	<p>3. Articole științifice publicate <i>in extenso</i> în reviste indexate BDI</p>	Scor individual 3 0
	<p>4. Articole științifice publicate <i>in extenso</i> în volumele conferințelor</p>	alte categorii: 5 puncte / număr autori
	<p>1. Irina Șchiopu, Aurelia Apetrei, Tudor Luchian, <i>Kinetics of pore formation by selected antimicrobial peptides monitored through a calcein release assay</i>, Revista Științifică V. Adamachi, 2011.</p>	$5 / 3 = 1,666$
	<p>2. Irina Șchiopu, Aurelia Apetrei, Tudor Luchian, <i>Fluorescence and electrophysiology investigation of cholesterol effect on the adsorption and activity of selected antimicrobial peptides</i>, Revista Științifică V. Adamachi, 2010.</p>	$5 / 3 = 1,666$
		Scor individual 4 3,332



I. ACTIVITATEA DE CERCETARE (70%)	5. Cărți științifice publicate (doar prima ediție)	Scor individual 50
	6. Cărți științifice traduse și publicate în edituri din străinătate	Scor individual 60
	7. Coordonarea și editarea de volume traduceri și antologii	Scor individual 70
	8. Articole publicate în dicționare și enciclopedii	Scor individual 80
	9. Contracte de cercetare științifică în instituții academice (universități, institute ale Academiei Române, institute naționale de cercetare, institute de cercetare din străinătate, alte categorii de institute academice)	
	1. Cercetător științific III în proiectul de cercetare nr. 830/21.01.2015 (România-Coreea): „Design and Development of Therapeutic AMPs against Epidemic Superbugs” (272.858 USD ≈ 257.334 EUR). (1 USD = 0.943107 EUR la 06.01.2016)	contracte internaționale – membru: 100 puncte pentru fiecare 100.000 euro / numărul membrilor echipei de cercetare 100 x (257.334/100.000)/8 = 32,166
	1. Director de proiect al proiectului de cercetare nr. 64/2015, PN-II-RU-TE-2014-4-2388: „Metodă bazată pe nanopori de detecție și cuantificare a bacteriilor prin interacțiunea selectivă a peptidelor antimicrobiene cu membrane bacteriene” (550.000 lei).	contracte naționale – director: 50 puncte pentru fiecare 500.000 lei 50 x (550.000/500.000) = 55,000
	1. Cercetător științific în proiectul de cercetare nr.123/2012, PN-II-PT-PCCA-2011-3.1-0595: „Rational design and generation of synthetic, short antimicrobial peptides” (700.000 lei).	contracte naționale – membru: 50 puncte pentru fiecare 500.000 lei / numărul membrilor echipei de cercetare 50 x (700.000/500.000)/6 = 11,666



I. ACTIVITATEA DE CERCETARE (70%)	2. Cercetător științific în proiectul de cercetare PN-II-ID-PCCE-2011-2-0027/01.06.2012: <i>„Ion sensing and separation through modified cyclic peptides, cyclodextrines and protein pores” (1.200.000 lei).</i>	50 x (1.200.000/500.000)/6 = 20,000
	3. Cercetător științific în proiectul de cercetare PN-II-ID-PCE-2011-3-0270 nr. 267 /05.10.2011: <i>„Funcționalizarea cu plasmă a sondelor nanoscopice” (1.499.187 lei)</i>	50 x (1.499.187/500.000)/7 = 21,416
	4. Asistent de cercetare în proiectul de cercetare PEPCITOTUM, nr: 62061/2008: <i>„Elucidarea mecanismelor de interacțiune a unor peptide citotoxice selectate cu celule tumorale, și optimizarea proprietăților lor anti-tumorale” (372.376 lei).</i>	50 x (372.376 / 500.000)/9 = 4,137
		Scor individual 9 144,385
	10. Contracte de cercetare în mediul de afaceri și sectorul public	Scor individual 10 0
	11. Brevete	Scor individual 11 0
	12. Citări și recenzii ale lucrărilor științifice <hr/> * Aurelia Apetrei, Lucel Sîrghi, Stochastic Adhesion of Hydroxylated Atomic Force Microscopy Tips to Supported Lipid Bilayers, 2013, Langmuir 29(52), 16098-16104, citat în: <hr/> 1. C.D. Ma et al., Interaction of the Hydrophobic Tip of an Atomic Force Microscope with Oligopeptides Immobilized Using Short and Long Tethers, 2016, Langmuir 32(12), 2985-2995 <hr/> * Yeranddy Alpizar, Maarten Gees, Alicia Sanchez, Aurelia Apetrei, Thomas Voets, Bernd Nilius, Karel Talavera, Bimodal effects of cinnamaldehyde and camphor on mouse TRPA1, 2013, Pflugers Archiv-European Journal Of Physiology 465(6), 853-864, citat în: <hr/>	Reviste de specialitate din străinătate: (10+ 20x factor de impact) / număr autori, pentru fiecare citare (10 + 20 x 3,993)/2 = 44,930



I. ACTIVITATEA DE CERCETARE (70%)	1. E.A. Hoeck et al., <i>Preclinical and human surrogate models of itch</i> , 2016, Experimental Dermatology 25(10), 750-757	$(10 + 20 \times 2,675)/7 = 9,071$
	2. A. Jawale et al., <i>Reversal of diabetes-induced behavioral and neurochemical deficits by cinnamaldehyde</i> , 2016, Phytomedicine 23(9), 923-930	$(10 + 20 \times 2,937)/7 = 9,820$
	3. T.K. Jensen et al., <i>Reversal of diabetes-induced behavioral and neurochemical deficits by cinnamaldehyde</i> , 2016, European Journal Of Oral Sciences 124(4), 349-357	$(10 + 20 \times 1,607)/7 = 6,020$
	4. J. Rosendahl et al., <i>Evidence for the functional involvement of members of the TRP channel family in the uptake of Na⁺ and NH₄ (+) by the ruminal epithelium</i> , 2016, Pflugers Archiv-European Journal Of Physiology 468(8), 1333-1352	$(10 + 20 \times 3,654)/7 = 11,869$
	5. G.D. Anaya-Eugenio et al., <i>Antinociceptive activity of the essential oil from Artemisia ludoviciana</i> , 2016, Journal Of Ethnopharmacology 179, 403-411	$(10 + 20 \times 3,055)/7 = 10,157$
	6. G. Peng et al., <i>Plant-Derived Tick Repellents Activate the Honey Bee Ectoparasitic Mite TRPA1</i> , 2015, Cell Reports 12(2), 190-202	$(10 + 20 \times 7,870)/7 = 23,914$
	7. D. Preti et al., <i>Transient receptor potential ankyrin 1 (TRPA1) antagonists</i> , 2015, Pharmaceutical Patent Analyst 4(2), 75-94	$(10 + 20 \times 0,000)/7 = 1,429$
	8. J. Alvarez-Collazo et al., <i>Cinnamaldehyde inhibits L-type calcium channels in mouse ventricular cardiomyocytes and vascular smooth muscle cells</i> , 2014, Pflugers Archiv-European Journal Of Physiology 466(11), 2089-2099	$(10 + 20 \times 4,101)/7 = 13,146$
	9. B. Nilius and A. Szallasi, <i>Transient Receptor Potential Channels as Drug Targets: From the Science of Basic Research to the Art of Medicine</i> , 2014, Pharmacological Reviews 66(3), 676-814	$(10 + 20 \times 17,099)/7 = 50,283$
	10. J.J. DeBerry et al., <i>TRPA1 mediates bladder hyperalgesia in a mouse model of cystitis</i> , 2014, PAIN 155(7), 1280-1287	$(10 + 20 \times 5,213)/7 = 16,323$
	11. X. Wan et al., <i>Bimodal voltage dependence of TRPA1: mutations of a key pore helix residue reveal strong intrinsic voltage-dependent inactivation</i> , 2014, Pflugers Archiv-European Journal Of Physiology 466(7), 1273-1287	$(10 + 20 \times 4,101)/7 = 13,146$



I. ACTIVITATEA DE CERCETARE (70%)	12. L. Van Gerven et al., <i>Capsaicin treatment reduces nasal hyperreactivity and transient receptor potential cation channel subfamily V, receptor 1 (TRPV1) overexpression in patients with idiopathic rhinitis</i> , 2014, Journal Of Allergy And Clinical Immunology 133(5), 1332-U544	$(10 + 20 \times 11,476)/7 = 34,217$
	13. W.J. Redmond et al., <i>Ligand determinants of fatty acid activation of the pronociceptive ion channel TRPA1</i> , 2014, PeerJ 2: e248	$(10 + 20 \times 2,183)/7 = 7,666$
	14. P.M. Zygmunt et al., <i>TRPA1 in Mammalian Transient Receptor Potential (Trp) Cation Channels</i> , Vol I, 2014, Book Series: Handbook of Experimental Pharmacology , Volume 222, 583-630	$(10 + 20 \times 0,000)/7 = 1,429$
	15. M. Takaishi et al., <i>Inhibitory effects of monoterpenes on human TRPA1 and the structural basis of their activity</i> , 2014, Journal Of Physiological Sciences 64(1), 47-57	$(10 + 20 \times 1,899)/7 = 6,854$
	16. Y.A. Alpizar et al., <i>Lack of correlation between the amplitudes of TRP channel-mediated responses to weak and strong stimuli in intracellular Ca²⁺ imaging experiments</i> , 2013, Cell Calcium 54(5), 362-374	$(10 + 20 \times 4,210)/7 = 13,457$
	* Irina Șchiopu, Loredana Mereuță, Aurelia Apetrei, Yoonkyung Park, Kyung-Soo Hahm, Tudor Luchian, <i>The role of tryptophan spatial arrangement for antimicrobial-derived, membrane-active peptides adsorption and activity</i> , 2012, <i>Molecular BioSystems</i> 8(11), 2860-2863, citat în:	
	1. S. Ma et al., <i>Isolation of a novel bio-peptide from walnut residual protein inducing apoptosis and autophagy on cancer cells</i> , 2015, BMC Complementary And Alternative Medicine 15: 413	$(10 + 20 \times 1,987)/6 = 8,290$
	2. D. Koller and K. Lohner, <i>The role of spontaneous lipid curvature in the interaction of interfacially active peptides with membranes</i> , 2014, BBA-Biomembranes 1838(9), Special Issue, 2250-2259	$(10 + 20 \times 3,836)/6 = 14,453$
	3. G. Li et al., <i>Tryptophan as a Probe to Study the Anticancer Mechanism of Action and Specificity of alpha-Helical Anticancer Peptides</i> , 2014, Molecules 19(8), 12224-12241	$(10 + 20 \times 2,416)/6 = 9,720$



I. ACTIVITATEA DE CERCETARE (70%)	<p>4. L. Mereuta et al., <i>Protein Nanopore-Based, Single-Molecule Exploration of Copper Binding to an Antimicrobial-Derived, Histidine-Containing Chimera Peptide</i>, 2012, Langmuir 28(49), 17079-17091</p> <p>* A. Asandei, Aurelia Apetrei, Y. Park, K.-S. Hahm, T. Luchian, <i>Investigation of Single-Molecule Kinetics Mediated by Weak Hydrogen Bonds within a Biological Nanopore</i>, 2011, <i>Langmuir</i> 27(1), 19-24, citată în:</p>	$(10 + 20 \times 4,187)/6 = 15,623$
	<p>1. A. Asandei et al., <i>Electroosmotic Trap Against the Electrophoretic Force Near a Protein Nanopore Reveals Peptide Dynamics During Capture and Translocation</i>, 2016, ACS Applied Materials & Interfaces 8(20), 13166-13179</p>	$(10 + 20 \times 7,145)/5 = 30,580$
	<p>2. A. Asandei et al., <i>Acidity-Mediated, Electrostatic Tuning of Asymmetrically Charged Peptides Interactions with Protein Nanopores</i>, 2015, ACS Applied Materials & Interfaces 7(30), 16706-16714</p>	$(10 + 20 \times 7,145)/5 = 30,580$
	<p>3. I. Schiopu et al., <i>Nanopore Investigation of the Stereoselective Interactions between Cu²⁺ and D,L-Histidine Amino Acids Engineered into an Amyloidic Fragment Analogue</i>, 2015, Langmuir 31(1), 387-396</p>	$(10 + 20 \times 3,993)/5 = 17,972$
	<p>4. Z. Cournia et al., <i>Membrane Protein Structure, Function, and Dynamics: a Perspective from Experiments and Theory</i>, 2015, Journal Of Membrane Biology 248(4), 611-640</p>	$(10 + 20 \times 1,991)/5 = 9,964$
	<p>5. A. Asandei et al., <i>Placement of oppositely charged aminoacids at a polypeptide termini determines the voltage-controlled braking of polymer transport through nanometer-scale pores</i>, 2015, Scientific Reports 5: 10419</p>	$(10 + 20 \times 5,228)/5 = 22,912$
	<p>6. L. Mereuta et al., <i>Quantitative Understanding of pH- and Salt-Mediated Conformational Folding of Histidine-Containing, beta-Hairpin -like Peptides through Single-Molecule Probing with Protein Nanopores</i>, 2014, ACS Applied Materials & Interfaces 6(15), 13242-13256</p>	$(10 + 20 \times 6,723)/5 = 28,892$



	<p>7. A. Asandei et al., <i>Probing of Various Physiologically Relevant Metals: Amyloid-beta Peptide Interactions with a Lipid Membrane-Immobilized Protein Nanopore</i>, 2014, Journal Of Membrane Biology 247(6), 523-530</p> <p>8. L. Mereuta et al., <i>Slowing down single-molecule trafficking through a protein nanopore reveals intermediates for peptide translocation</i>, 2014, Scientific Reports 4: 3885</p> <p>9. A. Asandei et al., <i>Investigation of Cu²⁺ Binding to Human and Rat Amyloid Fragments A beta (1-16) with a Protein Nanopore</i>, 2013, Langmuir 29(50), 15634-15642</p> <p>10. E. Campos et al., <i>Sensing Single Mixed-Monolayer Protected Gold Nanoparticles by the alpha-Hemolysin Nanopore</i>, 2013, Analytical Chemistry 85(21), 10149-10158</p> <p>11. L. Mereuta et al., <i>Protein Nanopore-Based, Single-Molecule Exploration of Copper Binding to an Antimicrobial-Derived, Histidine-Containing Chimera Peptide</i>, 2012, Langmuir 28(49), 17079-17091</p> <p>12. E. Campos et al., <i>The Role of Lys147 in the Interaction between MPSA-Gold Nanoparticles and the alpha-Hemolysin Nanopore</i>, 2012, Langmuir 28(44) 15643-15650</p> <p>13. A. Asandei et al., <i>The Kinetics of Ampicillin Complexation by gamma-Cyclodextrins. A Single Molecule Approach</i>, 2011, Journal Of Physical Chemistry B 115(33), 10173-10181</p> <p>14. Y.L. Ying et al., <i>Enhanced translocation of poly(dt)₄₅ through an α-hemolysin nanopore by binding with antibody</i>, 2011, Chemical Communications 47, 5690-5692</p> <p>15. Ostroumova Olga S. et al., <i>5-and 4'-Hydroxylated flavonoids affect voltage gating of single alpha-hemolysin pore</i>, 2011, BBA – Biomembranes 1808(8), 2051-2058</p> <hr/> <p>* A. Asandei, Aurelia Apetrei, T. Luchian, <i>Uni-molecular detection and quantification of selected beta-lactam antibiotics with a hybrid alpha-hemolysin protein pore</i>, 2011, Journal of</p>	<p>(10+ 20x 2,457)/5 = 11,828</p> <p>(10+ 20x 5,578)/5 = 24,312</p> <p>(10+ 20x 4,384)/5 = 19,536</p> <p>(10+ 20x 5,825)/5 = 25,300</p> <p>(10+ 20x 4,187)/5 = 18,748</p> <p>(10+ 20x 4,187)/5 = 18,748</p> <p>(10+ 20x 3,696)/5 = 16,784</p> <p>(10+ 20x 6,169)/5 = 26,676</p> <p>(10+ 20x 3,990)/5 = 17,960</p>
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Molecular Recognition 24(2), 199-207, citat în:

1. E.J. Campos et al., <i>Stochastic Detection of MPSA-Gold Nanoparticles Using a alpha-Hemolysin Nanopore Equipped with a Noncovalent Molecular Adaptor</i> , 2016, Analytical Chemistry 88(12), 6214-6222	$(10 + 20 \times 5,886)/3 = 42,573$
2. A. Asandei et al., <i>Electroosmotic Trap Against the Electrophoretic Force Near a Protein Nanopore Reveals Peptide Dynamics During Capture and Translocation</i> , 2016, ACS Applied Materials & Interfaces 8(20), 13166-13179	$(10 + 20 \times 7,145)/3 = 50,967$
3. A. Asandei et al., <i>Acidity-Mediated, Electrostatic Tuning of Asymmetrically Charged Peptides Interactions with Protein Nanopores</i> , 2015, ACS Applied Materials & Interfaces 7(30), 16706-16714	$(10 + 20 \times 7,145)/3 = 50,967$
4. I. Schiopu et al., <i>Nanopore Investigation of the Stereoselective Interactions between Cu²⁺ and D,L-Histidine Amino Acids Engineered into an Amyloidic Fragment Analogue</i> , 2015, Langmuir 31(1), 387-396	$(10 + 20 \times 3,993)/3 = 29,953$
5. A. Asandei et al., <i>Placement of oppositely charged aminoacids at a polypeptide termini determines the voltage-controlled braking of polymer transport through nanometer-scale pores</i> , 2015, Scientific Reports 5: 10419	$(10 + 20 \times 5,228)/3 = 38,187$
6. L. Mereuta et al., <i>Quantitative Understanding of pH- and Salt-Mediated Conformational Folding of Histidine-Containing, beta-Hairpin -like Peptides through Single-Molecule Probing with Protein Nanopores</i> , 2014, ACS Applied Materials & Interfaces 6(15), 13242-13256	$(10 + 20 \times 6,723)/3 = 48,153$
7. P.A. Gurnev et al., <i>Channel-Forming Bacterial Toxins in Biosensing and Macromolecule Delivery</i> , 2014, Toxins 6(8), 2483-2540	$(10 + 20 \times 2,938)/3 = 22,920$
8. A. Asandei et al., <i>Investigation of Cu²⁺ Binding to Human and Rat Amyloid Fragments A beta (1-16) with a Protein Nanopore</i> , 2013, Langmuir 29(50), 15634-15642	$(10 + 20 \times 4,384)/3 = 32,560$
9. L. Mereuta et al., <i>Protein Nanopore-Based, Single-Molecule Exploration of Copper Binding to an Antimicrobial-Derived, Histidine-Containing Chimera Peptide</i> , 2012, Langmuir 28(49), 17079-17091	$(10 + 20 \times 4,187)/3 = 31,247$



	<p>10. E. Campos et al., <i>The Role of Lys147 in the Interaction between MPSA-Gold Nanoparticles and the alpha-Hemolysin Nanopore</i>, 2012, Langmuir 28(44) 15643-15650</p> <p>11. C. Batchelor-McAuley et al., <i>New Electrochemical Methods</i>, 2012, Analytical Chemistry 84(2), 669-684</p> <p>12. A. Asandei et al., <i>The Kinetics of Ampicillin Complexation by gamma-Cyclodextrins. A Single Molecule Approach</i>, 2011, Journal Of Physical Chemistry B 115(33), 10173-10181</p> <p>13. Y. Keitaro et al., <i>Crystal structure of the octameric pore of staphylococcal gamma-hemolysin reveals the beta-barrel pore formation mechanism by two components</i>, 2011, PNAS USA 108(42), 17314-17319</p> <hr/> <p>* W. Everaerts, M. Gees, Y. Alpizar, R. Farre, C. Lenten, Aurelia Apetrei, I. Dewachter, F. van Leuven, R. Vennekens, D. De Ridder, B. Nilius, T. Voets, K. Talavera, <i>The capsaicin receptor TRPV1 is a crucial mediator of the noxious effects of mustard oil</i>, 2011, <i>Current Biology</i> 21(4), 316-321, citat în:</p> <hr/> <p>1. S. Shang et al., <i>Intracellular TRPA1 mediates Ca²⁺ release from lysosomes in dorsal root ganglion neurons</i>, 2016, Journal Of Cell Biology 215(3), 369-381</p> <p>2. D. Su et al., <i>TRPA1 and TRPV1 contribute to iodine antiseptics- associated pain and allergy</i>, 2016, EMBO Reports 17(10), 1422-1430</p> <p>3. A. Janssens et al., <i>Definition of two agonist types at the mammalian cold- activated channel TRPM8</i>, 2016, eLife 5: e17240</p> <p>4. R. Vianello et al., <i>The Use of Multiscale Molecular Simulations in Understanding a Relationship between the Structure and Function of Biological Systems of the Brain: The Application to Monoamine Oxidase Enzymes</i>, 2016, Frontiers In Neuroscience 10: 327</p> <p>5. V. Tekus et al., <i>Noxious heat threshold temperature and pronociceptive effects of allyl isothiocyanate</i></p>	<p>$(10+ 20 \times 4,187)/3 = 31,247$</p> <p>$(10+ 20 \times 5,695)/3 = 41,300$</p> <p>$(10+ 20 \times 3,696)/3 = 27,973$</p> <p>$(10+ 20 \times 9,681)/3 = 67,873$</p> <p>$(10+ 20 \times 8,717)/13 = 14,180$</p> <p>$(10+ 20 \times 7,739)/13 = 12,675$</p> <p>$(10+ 20 \times 8,303)/13 = 13,543$</p> <p>$(10+ 20 \times 3,398)/13 = 5,997$</p> <p>$(10+ 20 \times 2,685)/13 = 4,900$</p>
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	(mustard oil) in TRPV1 or TRPA1 gene-deleted mice, 2016, Life Sciences 154, 66-74	
6. J. Takaya and M. Uesugi, <i>Chemical Biological Analysis of TRPA1 Activation Mechanism</i> , 2016, Journal Of Synthetic Organic Chemistry Japan 74(5), 505-511		$(10+ 20 \times 0,537)/13 = 1,595$
7. X. Li, J.A. Coffield, <i>Structural and Functional Interactions between Transient Receptor Potential Vanilloid Subfamily 1 and Botulinum Neurotoxin Serotype A</i> , 2016, PLOS ONE 11(1): e0143024		$(10+ 20 \times 3,057)/13 = 5,472$
8. R. Samivel et al., <i>The role of TRPV1 in the CD4(+) T cell-mediated inflammatory response of allergic rhinitis</i> , 2016, Oncotarget 7(1), 148-160		$(10+ 20 \times 5,008)/13 = 8,474$
9. J. Donnerer and I. Liebmann, <i>ERK1/2 Phosphorylation in the Rat Supraoptic Nucleus, Dorsal Raphe Nucleus, and Locus Coeruleus Neurons Following Noxious Stimulation to the Hind Paw</i> , 2016, Pharmacology 97(1-2), 57-62		$(10+ 20 \times 1,533)/13 = 3,128$
10. M.M. Muley et al, <i>Preclinical Assessment of Inflammatory Pain</i> , 2016, CNS Neuroscience & Therapeutics 22(2) Special Issue, 88-101		$(10+ 20 \times 4,019)/13 = 6,952$
11. X. Zhang et al., <i>Extracranial injections of botulinum neurotoxin type A inhibit intracranial meningeal nociceptors' responses to stimulation of TRPV1 and TRPA1 channels: Are we getting closer to solving this puzzle?</i> , 2016, Cephalalgia 36(9), 875-886		$(10+ 20 \times 6,052)/13 = 10,080$
12. A. Soldano et al., <i>Gustatory-mediated avoidance of bacterial lipopolysaccharides via TRPA1 activation in Drosophila</i> , 2016, eLife 5: e13133		$(10+ 20 \times 8,303)/13 = 13,543$
13. Y.J. Choi et al., <i>Upregulation of Vanilloid Receptor-1 in Functional Dyspepsia With or Without Helicobacter pylori Infection</i> , 2016, Medicine 95(19): e3410		$(10+ 20 \times 2,133)/13 = 4,051$
14. T. Shibata et al., <i>Identification of a prostaglandin D-2 metabolite as a neuritogenesis enhancer targeting the TRPV1 ion channel</i> , 2016, Scientific Reports 6: 21261		$(10+ 20 \times 5,228)/13 = 8,812$
15. Y.-J. Lin et al., <i>A synergistic effect of simultaneous TRPA1 and TRPV1 activations on vagal pulmonary C-fiber afferents</i> , 2015, Journal Of Applied Physiology 118(3), 273-281		$(10+ 20 \times 3,004)/13 = 5,391$



16. C. Liu and C. Montell, <i>Forcing open TRP channels: Mechanical gating as a unifying activation mechanism</i> , 2015, Biochemical And Biophysical Research Communications 460(1), 22-25	$(10+ 20 \times 2,371)/13 = 4,417$
17. E.C. Emery et al., <i>Stimulation of GLP-1 Secretion Downstream of the Ligand-Gated Ion Channel TRPA1</i> , 2015, Diabetes 64(4), 1202-1210	$(10+ 20 \times 8,784)/13 = 14,283$
18. S. Luvisetto et al., <i>Analgesic effects of botulinum neurotoxin type A in a model of allyl isothiocyanate- and capsaicin-induced pain in mice</i> , 2015, Toxicon 94, 23-28	$(10+ 20 \times 2,309)/13 = 4,322$
19. N.K. Byrnes et al., <i>Perceptual Mapping of Chemesthetic Stimuli in Naive Assessors</i> , 2015, Chemosensory Perception 8(1), 19-32	$(10+ 20 \times 1,053)/13 = 2,389$
20. J. Donnerer and I. Liebmann, <i>pERK1/2 immunofluorescence in rat dorsal horn and paraventricular nucleus neurons as a marker for sensitization and inhibition in the pain pathway</i> , 2015, Tissue & Cell 47(1), 55-60	$(10+ 20 \times 1,258)/13 = 2,705$
21. J. Takaya et al., <i>A Potent and Site-Selective Agonist of TRPA1</i> , 2015, Journal Of The American Chemical Society 137(50), 15859-15864	$(10+ 20 \times 13,038)/13 = 20,828$
22. L.-Y. Lee et al., <i>Interaction between TRPA1 and TRPV1: Synergy on pulmonary sensory nerves</i> , 2015, Pulmonary Pharmacology & Therapeutics 35, 87-93	$(10+ 20 \times 2,930)/13 = 5,277$
23. Y. Terada et al., <i>Structure-Activity Relationship Study on Isothiocyanates: Comparison of TRPA1-Activating Ability between Allyl Isothiocyanate and Specific Flavor Components of Wasabi, Horseradish, and White Mustard</i> , 2015, Journal Of Natural Products 78(8), 1937-1941	$(10+ 20 \times 3,662)/13 = 6,403$
24. L.D. Islas et al., <i>A simple method for fast temperature changes and its application to thermal activation of TRPV1 ion channels</i> , 2015, Journal Of Neuroscience Methods 243, 120-125	$(10+ 20 \times 2,053)/13 = 3,928$
25. T. Summers et al., <i>Physiological, pharmacological and behavioral evidence for a TRPA1 channel that can elicit defensive responses in the medicinal leech</i> , 2015, Journal Of Experimental Biology 218(19), 3023-3031	$(10+ 20 \times 2,914)/13 = 5,252$



26. F. Ren et al., <i>Blockade of transient receptor potential cation channel subfamily V member 1 promotes regeneration after sciatic nerve injury</i> , 2015, Neural Regeneration Research 10(8), 1324-1331	$(10 + 20 \times 0,968) / 13 = 2,258$
27. P. Jain et al., <i>Behavioral and molecular processing of visceral pain in the brain of mice: impact of colitis and psychological stress</i> , 2015, Behavioral Neuroscience 9: 177	$(10 + 20 \times 2,690) / 13 = 4,908$
28. D. Kozai et al., <i>Deciphering Subtype-Selective Modulations in TRPA1 Biosensor Channels</i> , 2015, Current Neuropharmacology 13(2), 266-278	$(10 + 20 \times 3,753) / 13 = 6,543$
29. S. Bais et al., <i>Evidence for Novel Pharmacological Sensitivities of Transient Receptor Potential (TRP) Channels in Schistosoma mansoni</i> , 2015, PLOS Neglected Tropical Diseases 9(12): e0004295	$(10 + 20 \times 3,948) / 13 = 6,843$
30. J. Xing et al., <i>TRPA1 mediates amplified sympathetic responsiveness to activation of metabolically sensitive muscle afferents in rats with femoral artery occlusion</i> , 2015, Frontiers In Physiology 6: 249	$(10 + 20 \times 4,031) / 13 = 6,971$
31. M. Eberhardt et al., <i>H2S and NO cooperatively regulate vascular tone by activating a neuroendocrine HNO-TRPA1-CGRP signalling pathway</i> , 2014, Nature Communications 5: 4381	$(10 + 20 \times 11,470) / 13 = 18,415$
32. B. Nilius and A. Szallasi, <i>Transient Receptor Potential Channels as Drug Targets: From the Science of Basic Research to the Art of Medicine</i> , 2014, Pharmacological Reviews 66(3), 676-814	$(10 + 20 \times 17,099) / 13 = 27,075$
33. J. Vriens et al., <i>Peripheral thermosensation in mammals</i> , 2014, Nature Reviews Neuroscience 15(9), 573-589	$(10 + 20 \times 31,427) / 13 = 49,118$
34. J. Franken et al., <i>TRP channels in lower urinary tract dysfunction</i> , 2014, British Journal Of Pharmacology 171(10) Special Issue, 2537-2551	$(10 + 20 \times 4,842) / 13 = 8,218$
35. V. Spahn et al., <i>Modulation of Transient Receptor Vanilloid 1 Activity by Transient Receptor Potential Ankyrin 1</i> , 2014, Molecular Pharmacology 85(2), 335-344	$(10 + 20 \times 4,128) / 13 = 7,120$
36. R.W. Teichert et al., <i>Using constellation pharmacology to define comprehensively a somatosensory neuronal subclass</i> , 2014, PNAS	$(10 + 20 \times 9,674) / 13 = 15,652$



	<p>USA 111(6), 2319-2324</p> <p>37. B.I. Toth et al., <i>TRP channels in the skin</i>, 2014, British Journal Of Pharmacology 171(10) Special Issue, 2568-2581</p> <p>38. I. Nagy et al., <i>Pharmacology of the Capsaicin Receptor, Transient Receptor Potential Vanilloid Type-1 Ion Channel</i>, 2014, in <i>Capsaicin As A Therapeutic Molecule</i>, Book Series: Progress in Drug Research 68, 39-76</p> <p>39. Y.A. Alpizar et al., <i>Allyl isothiocyanate sensitizes TRPV1 to heat stimulation</i>, 2014, Pflugers Archiv-European Journal Of Physiology 466(3), 507-515</p> <p>40. P.P. Basu et al., <i>Review article: the endocannabinoid system in liver disease, a potential therapeutic target</i>, 2014, Alimentary Pharmacology & Therapeutics 39(8), 790-801</p> <p>41. A. Jurik et al., <i>Supraspinal TRPV1 modulates the emotional expression of abdominal pain</i>, 2014, PAIN 155(10), 2153-2160</p> <p>42. E. Kurganov et al., <i>Heat and AITC activate green anole TRPA1 in a membrane-delimited manner</i>, 2014, Pflugers Archiv-European Journal Of Physiology 466(10), 1873-1884</p> <p>43. S.K. Pittman et al., <i>Paclitaxel alters the evoked release of calcitonin gene-related peptide from rat sensory neurons in culture</i>, 2014, Experimental Neurology 253, 146-153</p> <p>44. G. Trevisan et al., <i>Mechanisms involved in abdominal nociception induced by either TRPV1 or TRPA1 stimulation of rat peritoneum</i>, 2013, European Journal Of Pharmacology 714(1-3), 332-344</p> <p>45. L.M. O'Mullane et al., <i>Co-Cultures Provide a New Tool to Probe Communication Between Adult Sensory Neurons and Urothelium</i>, 2013, Journal Of Urology 190(2), 737-745</p> <p>46. N. Mori et al., <i>Intragastric Administration of Allyl Isothiocyanate Reduces Hyperglycemia in Intraperitoneal Glucose Tolerance Test (IPGTT) by Enhancing Blood Glucose Consumption in Mice</i>, 2013, Journal Of Nutritional Science And Vitaminology 59(1), 56-63</p>	<p>$(10+ 20 \times 4,842)/13 = 8,218$</p> <p>$(10+ 20 \times 0,000)/13 = 0,769$</p> <p>$(10+ 20 \times 4,101)/13 = 7,078$</p> <p>$(10+ 20 \times 5,727)/13 = 9,580$</p> <p>$(10+ 20 \times 5,213)/13 = 8,789$</p> <p>$(10+ 20 \times 4,101)/13 = 7,078$</p> <p>$(10+ 20 \times 4,696)/13 = 7,994$</p> <p>$(10+ 20 \times 2,684)/13 = 4,898$</p> <p>$(10+ 20 \times 3,753)/13 = 6,543$</p> <p>$(10+ 20 \times 0,868)/13 = 2,105$</p>
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47. K. Nakatsuka et al., <i>Identification of Molecular Determinants for a Potent Mammalian TRPA1 Antagonist by Utilizing Species Differences</i> , 2013, Journal Of Molecular Neuroscience 51(3), 754-762	$(10+ 20 \times 2,757)/13 = 5,011$
48. P.K. Smith and B. Nilius, <i>Transient Receptor Potentials (TRPs) and Anaphylaxis</i> , 2013, Current Allergy And Asthma Reports 13(1), 93-100	$(10+ 20 \times 2,450)/13 = 4,538$
49. Z. Winter et al., <i>Functionally important amino acid residues in the transient receptor potential vanilloid 1 (TRPV1) ion channel - an overview of the current mutational data</i> , 2013, Molecular Pain 9: 30	$(10+ 20 \times 3,531)/13 = 6,202$
50. M. Gees et al., <i>Mechanisms of Transient Receptor Potential Vanilloid 1 Activation and Sensitization by Allyl Isothiocyanate</i> , 2013, Molecular Pharmacology 84(3), 325-334	$(10+ 20 \times 4,120)/13 = 7,108$
51. Y. Zhou et al., <i>Identification of a splice variant of mouse TRPA1 that regulates TRPA1 activity</i> , 2013, Nature Communications 4: 2399	$(10+ 20 \times 10,742)/13 = 17,295$
52. T.I. Kichko et al., <i>Bimodal Concentration -Response of Nicotine Involves the Nicotinic Acetylcholine Receptor, Transient Receptor Potential Vanilloid Type 1, and Transient Receptor Potential Ankyrin 1 Channels in Mouse Trachea and Sensory Neurons</i> , 2013, Journal Of Pharmacology And Experimental Therapeutics 347(2), 529-539	$(10+ 20 \times 3,855)/13 = 6,700$
53. M. Wyndaele et al., <i>Mechanisms of Pelvic Organ Crosstalk: 1. Peripheral Modulation of Bladder Inhibition by Colorectal Distention in Rats</i> , 2013, Journal Of Urology 190(2), 765-771	$(10+ 20 \times 3,753)/13 = 6,543$
54. M.J. Eberhardt et al., <i>Methylglyoxal Activates Nociceptors Through Transient Receptor Potential Channel A1 (TRPA1) A Possible Mechanism Of Metabolic Neuropathies</i> , 2012, Journal Of Biological Chemistry 287(34), 28291-28306	$(10+ 20 \times 4,651)/13 = 7,925$
55. M. Gees et al., <i>TRP Channels</i> , 2012, Comprehensive Physiology 2(1), 563-608	$(10+ 20 \times 0,807)/13 = 2,011$
56. S. Earley, <i>TRPA1 channels in the vasculature</i> , 2012, British Journal Of Pharmacology 167(1), 13-22	$(10+ 20 \times 5,067)/13 = 8,565$



57. H.J. Son et al., <i>Methyl syringate, a low-molecular-weight phenolic ester, as an activator of the chemosensory ion channel TRPA1</i> , 2012, Archives Of Pharmacal Research 35(12), 2211-2218	$(10+ 20 \times 1,538)/13 = 3,135$
58. M. Dux et al., <i>The role of chemosensitive afferent nerves and TRP ion channels in the pathomechanism of headaches</i> , 2012, Pflugers Archiv-European Journal Of Physiology 464(3), 239-248	$(10+ 20 \times 4,866)/13 = 8,255$
59. K. Uchida et al., <i>Isothiocyanates from Wasabia japonica Activate Transient Receptor Potential Ankyrin 1 Channel</i> , 2012, Chemical Senses 37(9), 809-818	$(10+ 20 \times 3,222)/13 = 5,726$
60. H.J. Son et al., <i>Activation of the Chemosensory Ion Channels TRPA1 and TRPV1 by Hydroalcohol Extract of Kalopanax pictus Leaves</i> , 2012, Biomolecules & Therapeutics 20(6), 550-555	$(10+ 20 \times 0,794)/13 = 1,991$
61. P. Uvin et al., <i>The Use of Cystometry in Small Rodents: A Study of Bladder Chemosensation</i> , 2012, JoVE-Journal Of Visualized Experiments 66: UNSP e3869	$(10+ 20 \times 1,325)/13 = 2,808$
62. T. Yu et al., <i>Activation of oral trigeminal neurons by fatty acids is dependent upon intracellular calcium</i> , 2012, Pflugers Archiv-European Journal Of Physiology 464(2) 227-237	$(10+ 20 \times 4,866)/13 = 8,255$
63. A.E. Olesen et al., <i>Human Experimental Pain Models for Assessing the Therapeutic Efficacy of Analgesic Drugs</i> , 2012, Pharmacological Reviews 64(3), 722-779	$(10+ 20 \times 22,345)/13 = 35,146$
64. S. Wang et al., <i>Warmth suppresses and desensitizes damage-sensing ion channel TRPA1</i> , 2012, Molecular Pain 8, no.22	$(10+ 20 \times 3,774)/13 = 6,575$
65. J.I. Glendinning et al., <i>Fetal ethanol exposure attenuates aversive oral effects of TrpV1, but not TrpA1 agonists in rats</i> , 2012, Experimental Biology And Medicine 237(3), 236-240	$(10+ 20 \times 2,803)/13 = 5,082$
66. E.L. Andrade et al., <i>TRPA1 antagonists as potential analgesic drugs</i> , 2012, Pharmacology & Therapeutics 133(2), 189-204	$(10+ 20 \times 7,793)/13 = 12,758$
67. J. Donnerer and I. Liebmann, <i>Phosphorylation of ERK1/2 in Dorsal Root Ganglia following Sequential Mustard Oil and Thermal Stimulation of</i>	$(10+ 20 \times 1,603)/13 = 3,235$



	<i>the Rat Hind Paw</i> , 2012, Pharmacology 89(1-2), 7-12	
	68. N. Takahashi and Y. Mori, <i>TRP channels as sensors and signal integrators of redox status changes</i> , 2011, Frontiers In Pharmacology 2: UNSP 58	$(10+ 20 \times 3,802)/13 = 6,618$
	69. Shigetomi Eiji et al., <i>TRPA1 channels regulate astrocyte resting calcium and inhibitory synapse efficacy through GAT-3</i> , 2011, Nature Neuroscience 15(1), 70-U215	$(10+ 20 \times 15,531)/13 = 24,663$
	70. K.Weller et al., <i>TRPV1, TRPA1, and CB1 in the isolated vagus nerve - Axonal chemosensitivity and control of neuropeptide release</i> , 2011, Neuropeptides 45(6), 391-400	$(10+ 20 \times 1,553)/13 = 3,158$
	71. Jain Anil et al., <i>TRP-channel-specific cutaneous eicosanoid release patterns</i> , 2011, PAIN 152(12), 2765-2772	$(10+ 20 \times 5,777)/13 = 9,657$
	72. Skryma Roman et al., <i>From urgency to frequency: facts and controversies of TRPs in the lower urinary tract</i> , 2011, Nature Reviews Urology 8(11), 617-630	$(10+ 20 \times 4,415)/13 = 7,562$
	73. Brierley Stuart M. et al., <i>TRPA1 contributes to specific mechanically activated currents and sensory neuron mechanical hypersensitivity</i> , 2011, Journal of Physiology-London 589(14), 3575-3593	$(10+ 20 \times 4,881)/13 = 8,278$
	74. Brozmanova M. et al., <i>Preferential activation of the vagal nodose nociceptive subtype by TRPA1 agonists in the guinea pig esophagus</i> , 2011, Neurogastroenterology And Motility 23(10), E437-E445	$(10+ 20 \times 3,414)/13 = 6,022$
	75. Holzer Peter, <i>Transient receptor potential (TRP) channels as drug targets for diseases of the digestive system</i> , 2011, Pharmacology & Therapeutics 131(1), 142-170	$(10+ 20 \times 8,562)/13 = 13,942$
	76. Raisinghani Manish et al., <i>Activation characteristics of transient receptor potential ankyrin 1 and its role in nociception</i> , 2011, American Journal of Physiology – Cell Physiology 301(3), 587-600	$(10+ 20 \times 3,536)/13 = 6,209$
	77. C. Grimm et al., <i>Dissecting TRPV1: Lessons to be learned?</i> , 2011, Channels 5(3), 201-204	$(10+ 20 \times 2,140)/13 = 4,062$



	<p>* Aurelia Apetrei, Alina Asandei, Yoonkyung Park, Kyung-Soo Hahm, Mathias Winterhalter, Tudor Luchian, <i>Unimolecular study of the interaction between the outer membrane protein OmpF from E. coli and an analogue of the HP(2–20) antimicrobial peptide</i>, 2010, <i>Journal of Bioenergetics and Biomembranes</i> 42(2), 172-180, citat în:</p> <hr/> <ol style="list-style-type: none">1. A. Asandei et al., <i>Electroosmotic Trap Against the Electrophoretic Force Near a Protein Nanopore Reveals Peptide Dynamics During Capture and Translocation</i>, 2016, <i>ACS Applied Materials & Interfaces</i> 8(20), 13166-131792. M.-F. Lin et al., <i>OmpA Binding Mediates the Effect of Antimicrobial Peptide LL-37 on Acinetobacter baumannii</i>, 2015, <i>PLOS ONE</i> 10(10): e01411073. J. Cruz et al., <i>Antimicrobial Peptides: Promising Compounds Against Pathogenic Microorganisms</i>, 2014, <i>Current Medicinal Chemistry</i> 21(20), 2299-23214. L. Mereuta et al., <i>Slowing down single-molecule trafficking through a protein nanopore reveals intermediates for peptide translocation</i>, 2014, <i>Scientific Reports</i> 4: 38855. G. Ghale et al., <i>Chemosensing Ensembles for Monitoring Biomembrane Transport in Real Time</i>, 2014, <i>Angewandte Chemie -International Edition</i> 53(10), 2762-27656. U. Lamichhane et al., <i>Peptide translocation through the mesoscopic channel: binding kinetics at the single molecule level</i>, 2013, <i>European Biophysics Journal With Biophysics Letters</i> 42(5), 363-3697. L. Mereuta et al., <i>Protein Nanopore-Based, Single-Molecule Exploration of Copper Binding to an Antimicrobial-Derived, Histidine-Containing Chimera Peptide</i>, 2012, <i>Langmuir</i> 28(49), 17079-170918. A. Brauser et al., <i>Modulation of enrofloxacin binding in OmpF by Mg²⁺ as revealed by the analysis of fast flickering single-porin current</i>, 2012, <i>J. Of General Physiology</i> 140(1), 69-82	<p>$(10 + 20 \times 7,145)/6 = 25,483$</p> <p>$(10 + 20 \times 3,057)/6 = 11,857$</p> <p>$(10 + 20 \times 3,853)/6 = 14,510$</p> <p>$(10 + 20 \times 5,578)/6 = 20,260$</p> <p>$(10 + 20 \times 11,261)/6 = 39,203$</p> <p>$(10 + 20 \times 2,474)/6 = 9,913$</p> <p>$(10 + 20 \times 4,187)/6 = 15,623$</p> <p>$(10 + 20 \times 4,730)/6 = 17,433$</p>
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	<p>9. C. Christensen et al., <i>Effect of charge, topology and orientation of the electric field on the interaction of peptides with the alpha-hemolysin pore</i>, 2011, Journal Of Peptide Science 17(11), 726-734</p> <p>10. L.T. Nguyen et al., <i>The expanding scope of antimicrobial peptide structures and their modes of action</i>, 2011, Trends In Biotechnology 29 (9), 464-472</p> <p>11. B.M. Radu et al., <i>Mechanisms of Ceftazidime and Ciprofloxacin Transport through Porins in Multidrug-Resistance Developed by Extended-Spectrum Beta-Lactamase E.coli Strains</i>, 2011, Journal of Fluorescence 21(4), 1421-1429</p> <p>12. N.G. Housden et al., <i>Directed epitope delivery across the Escherichia coli outer membrane through the porin OmpF</i>, 2010, PNAS USA 107(50), 21412-21417</p> <hr/> <p>* Aurelia Apetrei, Loredana Mereuță, Tudor Luchian, <i>The RH 421 styryl dye induced, pore model-dependent modulation of antimicrobial peptides activity in reconstituted planar membranes</i>, 2009, <i>Biochimica et Biophysica Acta – General Subjects</i> 1790(8), 809-816, citat în:</p> <hr/> <p>1. S.S. Efimova et al., <i>Effects of Dipole Potential Modifiers on Heterogenic Lipid Bilayers</i>, 2016, Journal Of Membrane Biology 249(1-2), 97-106</p> <p>2. S.S. Efimova et al., <i>Two types of syringomycin E channels in sphingomyelin- containing bilayers</i>, 2016, European Biophysics Journal With Biophysics Letters 45(1), 91-98</p> <p>3. I. Schiopu et al., <i>Nanopore Investigation of the Stereoselective Interactions between Cu²⁺ and D,L-Histidine Amino Acids Engineered into an Amyloidic Fragment Analogue</i>, 2015, Langmuir 31(1), 387-396</p> <p>4. E.G. Chulkov et al., <i>Membrane dipole modifiers modulate single-length nystatin channels via reducing elastic stress in the vicinity of the lipid mouth of a pore</i>, 2015, BBA-Biomembranes</p>	<p>$(10 + 20 \times 1,799)/6 = 7,663$</p> <p>$(10 + 20 \times 9,148)/6 = 32,160$</p> <p>$(10 + 20 \times 2,107)/6 = 8,690$</p> <p>$(10 + 20 \times 9,771)/6 = 34,237$</p> <p>$(10 + 20 \times 1,991)/3 = 16,607$</p> <p>$(10 + 20 \times 1,444)/3 = 12,960$</p> <p>$(10 + 20 \times 3,993)/3 = 29,953$</p> <p>$(10 + 20 \times 3,687)/3 = 27,913$</p>
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	1848(1), 192-199	
	5. S.S. Efimova et al., <i>Modifiers of the Dipole Potential of Lipid Bilayers</i> , 2015, Acta Naturae 7(4), 70-79	$(10 + 20 \times 1,770)/3 = 15,133$
	6. S.S. Efimova et al., <i>Investigation of Channel-Forming Activity of Polyene Macrolide Antibiotics in Planar Lipid Bilayers in the Presence of Dipole Modifiers</i> , 2014, Acta Naturae 6(4), 67-79	$(10 + 20 \times 1,000)/3 = 10,000$
	7. O.S. Ostroumova et al., <i>The interaction of dipole modifiers with amphotericin-ergosterol complexes. Effects of phospholipid and sphingolipid membrane composition</i> , 2014, European Biophysics Journal With Biophysics Letters 43(4-5), 207-215	$(10 + 20 \times 2,219)/3 = 18,127$
	8. S.S. Efimova et al., <i>Channel-Forming Activity of Cecropins in Lipid Bilayers: Effect of Agents Modifying the Membrane Dipole Potential</i> , 2014, Langmuir 30(26), 7884-7892	$(10 + 20 \times 4,457)/3 = 33,047$
	9. L. Kredics et al., <i>Recent Results in Alamethicin Research</i> , 2013, Chemistry & Biodiversity 10(5), 744-771	$(10 + 20 \times 1,795)/3 = 15,300$
	10. O.S. Ostroumova et al., <i>The Interaction of Dipole Modifiers with Polyene-Sterol Complexes</i> , 2012, PLOS ONE 7(9): e45135	$(10 + 20 \times 3,730)/3 = 28,200$
	11. L. Mereuta et al., <i>Meet Me on the Other Side: Trans-Bilayer Modulation of a Model Voltage-Gated Ion Channel Activity by Membrane Electrostatics Asymmetry</i> , 2011, PLOS ONE 6(9): e25276	$(10 + 20 \times 4,092)/3 = 30,613$
	12. V.V. Lemeshko, <i>Permeabilization of mitochondria and red blood cells by polycationic peptides BTM-P1 and retro-BTM-P1</i> , 2011, PEPTIDES 32, 2010-2020	$(10 + 20 \times 2,434)/3 = 19,560$
	13. O.S. Ostroumova et al., <i>Surfactin Activity Depends on the Membrane Dipole Potential</i> , 2010, Langmuir 26(19), 15092-15097	$(10 + 20 \times 4,268)/3 = 31,787$
	<i>Factorul de impact al revistei a fost completat cu valoarea corespunzătoare anului publicării articolului, respectiv celui mai apropiat an în situația absenței valorii pentru anul în cauză (conform Thomson Reuters-Journal Citation Reports)</i>	Scor Individual 12 2.344,571
	13. Lucrări susținute în calitate de invitat la manifestări științifice (conferințe, congrese, simpozioane)	Scor individual 13 0



	14. Profesor/cercetător invitat la universități /institute de cercetare	Scor individual 14 0
	15. Editor/Membru în Editorial Board & Advisory Board	Scor individual 15 0
	16. Premii internaționale obținute printr-un proces de selecție	100 puncte / categorie / număr de persoane
	1. Premiul II la conferința internațională "Australia-Croatia workshop on antimicrobial peptides: AMP 2010", Split, Croația, 9-14 august 2010, pentru lucrarea: <i>“Unimolecular study of the interaction between the outer membrane protein OmpF from E. coli and an analogue of the HP(2–20) antimicrobial peptide”</i>	Scor individual 16 0
	2. Premiu pentru cel mai bun poster "Nano-Biology" , acordat de NSF USA în cadrul conferinței "International Workshop NanoRomania", Iași, June 2-5, 2009, pentru lucrarea: <i>“Activity of antimicrobial peptides in reconstituted planar lipid membranes under the influence of membrane dipole moment modulatory agents”</i>	
		Scor individual 16 0
	17. Premii ale Academiei Române	Scor individual 17 0
	18. Alte premii naționale ale instituțiilor culturale	Scor individual 18 0
	19. Participări la manifestări științifice	naționale: membru comitet organizare, 5 puncte pentru fiecare activitate
	1. Membru în comitetul de organizare al conferinței 12 th National Conference on Biophysics, with international participation, 13-16 iunie 2013, Iasi, Romania (Prezentarea a 25 de lucrări în cadrul unor conferințe internaționale și a 24 de lucrări în cadrul unor conferințe naționale)	5
		Scor individual 19 5,000



	TOTAL ACTIVITATE DE CERCETARE	3.023,132
II. ACTIVITATEA DIDACTICĂ (30%)	1. Tratatate și manuale universitare	Scor individual 1 0
	2. Proiecte didactice (înființare/dotare laboratoare licență, master, săli workshop, biblioteci proprii)	40 puncte pentru fiecare activitate
	1. Achiziție accesorii Miroscop Confocal Inversat Nikon Eclipse Ti-E: - dioda laser 642 nm (23.785,23 lei); - software Nikon NisE-Ar (3.340,13 lei); - Cy5-4040C Filtre Cube (9.685,44 lei). Înainte de achiziționarea acestor accesorii, Microscopul Confocal era doar parțial funcțional. Microscopul este utilizat în cadrul laboratoarelor didactice de <i>Practică</i> pentru studenții din anul I Licență și Anul I Master, Specializarea Biofizică și Fizică Medicală. De asemenea, este echipamentul de bază implicat în realizarea unui număr de 3 Lucrări de Licență și 4 Lucrări de disertație.	40
	2. Achiziție lipide și electrozi EKG pentru Laboratoarele de <i>Biofizică Generală</i> , <i>Practică</i> și pentru realizarea Lucrărilor de Licență și Disertație	
		Scor individual 2 40,000
	3. Materiale suport curs, seminar, lucrări practice și programe analitice detaliate	10 puncte pentru fiecare activitate
	1. Materiale suport pentru laboratoarele și seminariile de <i>Biofizică Generală</i>	10
	2. Materiale suport pentru cursul și laboratorul de <i>Modelarea Numerică și analogică a proceselor biologice</i>	10
	3. Materiale suport pentru cursul și laboratorul de <i>Neurotransmițători și neurofarmaceutice</i>	10
		Scor individual 3 30,000



	4. Organizare de aplicații și practică de specialitate	5 puncte pentru fiecare activitate
	1. Organizare practică de specialitate pentru studenții anului I Licență, în laboratoarele de Biofizică și Fizică Medicală	5
	2. Organizare practică de specialitate pentru studenții anului I Master, specializarea Biofizică și Fizică Medicală	5
		Scor individual 4 10,000
	TOTAL ACTIVITATE DIDACTICĂ	80,000
TOTAL		3103,132