



ANEXA 1

FIȘĂ DE EVALUARE GENERALĂ A STANDARDELOR UNIVERSITĂȚII

DESCRIPTORI	PUNCTAJE ACORDATE
1. Articole științifice publicate in extenso în reviste cotate <i>Web of Science</i> cu factor de impact	(60 puncte × factor de impact +25) / număr autori
Ioana C. Bucataru †; Isabela S. Dragomir †; Alina Asandei; Ana-Maria Pantazica; Alina Ghionescu; Norica Branza-Nichita; YoonkyunG Park; Tudor Luchian, <i>Probing the Hepatitis B Virus E-Antigen with a Nanopore Sensor Based on Collisional Events Analysis</i> , BIOSENSORS-BASEL 2022, 12(8), 596, (†contribuții egale), Factor de impact: 5.743	$(60 \times 5.743 + 25) / 8 = 46.20$
Loredana Mereuta; Alina Asandei; Isabela S. Dragomir ; Jonggwan Park; Yoonkyung Park; Tudor Luchian, <i>A Nanopore Sensor for Multiplexed Detection of Short Polynucleotides Based on Length-Variable, Poly-Arginine-Conjugated Peptide Nucleic Acids</i> , ANALYTICAL CHEMISTRY 2022, 94(24), 8774-8782, Factor de impact: 8.008	$(60 \times 8.008 + 25) / 6 = 84.25$
Irina Schiopu, Alina Asandei, Loredana Mereuta, Isabela S. Dragomir , Ioana C. Bucataru, Tudor Luchian, <i>Single-Molecule Detection and Manipulation with Biological Nanopores</i> , STUDIA UNIVERSITATIS BABES-BOLYAI CHEMIA 2021, 66(3), 161-174, Factor de impact: 0.558	$(60 \times 0.558 + 25) / 6 = 9.75$
Isabela S. Dragomir †, Alina Asandei†, Irina Schiopu, Ioana C. Bucataru, Loredana Mereuta and Tudor Luchian, <i>The Nanopore-Tweezing-Based, Targeted Detection of Nucleobases on Short Functionalized Peptide Nucleic Acid Sequences</i> , Polymers 2021, 13, 1210, (†contribuții egale), factor de impact: 4.967	$(60 \times 4.967 + 25) / 6 = 53.84$
Loredana Mereuta, Alina Asandei, Isabela S. Dragomir , Ioana C. Bucataru, Jonggwan Park, Chang Ho Seo, Yoonkyung Park, Tudor Luchian, <i>"Sequence-Specific Detection of Single-Stranded DNA with a Gold Nanoparticle-Protein Nanopore Approach"</i> , Scientific Reports 2020, 10, 11323, Factor de impact: 4.380	$(60 \times 4.38 + 25) / 8 = 35.98$
Isabela S. Dragomir †, Ioana C. Bucataru†, Irina Schiopu, Tudor Luchian, <i>"Unzipping mechanism of free- and polyarginine-conjugated DNA-PNA duplexes, preconfined inside the α-hemolysin nanopore"</i> , Analytical Chemistry 2020, 2, 92(11), 7800-7807, (†contribuții egale), factor de impact: 6.986	$(60 \times 6.986 + 25) / 4 = 111.04$
Alina Asandei, Giovanni Di Muccio, Irina Schiopu, Loredana Mereuta, Isabela S. Dragomir , Mauro Chinappi, Tudor Luchian, <i>"Nanopore-Based Protein Sequencing Using Biopores: Current Achievements and Open Challenges"</i> , Small Methods 2020, 1900595, factor de impact: 14.188	$(60 \times 14.188 + 25) / 7 = 125.18$



Corina Ciobanasu, Isabela S. Dragomir , Aurelia Apetrei, <i>The penetrating properties of the tumor homing peptide LyP-1 in model lipid membrane</i> , Journal of Peptide Science 2019, 25(3), e3145, factor de impact: 1.877	$(60 \times 1.877 + 25) / 3 = 45.87$
[†] Alina Asandei, [†] Isabela S. Dragomir , Giovanni Di Muccio, Mauro Chinappi, Yoonkyung Park, Tudor Luchian, <i>Single-Molecule Dynamics and Discrimination between Hydrophilic and Hydrophobic Amino Acids in Peptides, through Controllable, Stepwise Translocation across Nanopores</i> , Polymers 2018, 10(8), 885, ([†] contribuții egale) factor de impact: 3.164	$(60 \times 3.164 + 25) / 6 = 35.81$
2. Articole științifice publicate <i>in extenso</i> în reviste indexate Web of Science fără factor de impact	-
3. Articole științifice publicate <i>in extenso</i> în reviste indexate BDI	-
4. Articole științifice publicate <i>in extenso</i> în volumele conferințelor	-
5. Cărți științifice publicate (doar prima ediție)	-
6. Cărți științifice traduse și publicate în edituri din străinătate	-
7. Coordonarea și editarea de volume, traduceri și antologii	-
8. Articole publicate în dicționare și enciclopedii	-
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)	contracte naționale – membru: 50 puncte pentru fiecare 500,000 lei / numărul membrilor echipei de cercetare
01-02-2021 – 31-12-2023: Asistent de cercetare științifică în cadrul proiectului PCE: <i>Detecția multiplex, cu sensibilitate și selectivitate moleculară, a unor miRNAs relevante fiziologic, cu ajutorul unor xeno acizi nucleici</i> , cod: PN-III-P4-ID-PCE-2020-001, acronim RNANANODETECT, director de proiect: prof. univ. dr. Tudor Luchian	$50 \times (1,198,032 / 500,000) / 6 = 19.97$
01-09-2020 – 31-08-2022: Asistent de cercetare științifică în cadrul proiectului TE: <i>Detecția multiplă și ultra-senzitivă a fragmentelor scurte de acizi nucleici, utilizând nanoparticule de aur și nanopori proteici</i> , cod: PN-III-P1-1.1-TE-2019-0037, acronim: NANOSENSEDNA, director de proiect: Conf. univ.dr. Loredana MEREUȚĂ	$50 \times (431,900 / 500,000) / 4 = 10.80$
15-07-2018 – 31-03-2021: Doctorand în cadrul proiectului complex de tip PCCDI, “Tehnologii moleculare emergente bazate pe sisteme micro și nano-structurate cu aplicații biomedicale”, cod: PN-III-P1-1.2-PCCDI-2017-0010, acronim TehnoBioMed, contract de finanțare nr.	$50 \times (990.000 / 500.000) / 8 = 12.38$



74PCCDI/01.03.2018, Proiect component nr.2: Dezvoltarea unor sisteme de transport și eliberare a unor molecule biologice active bazate pe dendrimeri, cu aplicații directe în domeniul biomedical și farmaceutic, responsabil partener UAIC: prof. univ. dr. Tudor Luchian	
10. Contracte de cercetare în mediul de afaceri și sector public	-
11. Brevete	-
12. Citări și recenzii ale lucrărilor științifice	reviste de specialitate din străinătate: $(10 + 20 \times \text{factor de impact}) / \text{număr de autori}$, pentru fiecare citare
Lucrare: Isabela S. Dragomir , Alina Asandei, Irina Schiopu, Ioana C. Bucataru, Loredana Mereuta and Tudor Luchian, <i>The Nanopore-Tweezing-Based, Targeted Detection of Nucleobases on Short Functionalized Peptide Nucleic Acid Sequences</i> , Polymers 2021, 13, 1210, factor de impact: 4.967 Citată în:	
<i>Artificial genetic polymers against human pathologies</i> Ivanov, GS; Tribulovich, VG; (...); Barlev, NA BIOLOGY DIRECT Volume 17 Issue 1 Article Number 39 Published DEC 6 2022	$(10 + 20 \times 7.173)/6 = 25.58$
<i>A Single-Molecule Insight into the Ionic Strength-dependent, Cationic Peptide Nucleic Acids-Oligonucleotides Interactions</i> , Asandei, A; Mereuta, L; (...); Luchian, T, CHEMISTRY-AN ASIAN JOURNAL Volume 17 Issue 12 Article Number 202200261 Published JUN 15 2022	$(10 + 20 \times 4.839)/6 = 17.80$
Lucrare: Loredana Mereuta, Alina Asandei, Isabela S. Dragomir , Ioana C. Bucataru, Jonggwan Park, Chang Ho Seo, Yoonkyung Park, Tudor Luchian, <i>"Sequence-Specific Detection of Single-Stranded DNA with a Gold Nanoparticle-Protein Nanopore Approach"</i> , Scientific Reports 2020, 10, 11323, factor de impact: 4.380 Citată în:	
<i>Advancement in Nanoparticle-based Biosensors for Point-of-care In vitro Diagnostics</i> Khizar, S; Elaissari, A; (...); Errachid, A URRANT TOPICS IN MEDICINAL CHEMISTRY Volume 22 Issue10 Page 807-833 Published 2022	$(10 + 20 \times 3.57)/8 = 10.18$
<i>Colorimetric and label free detection of gelatinase positive bacteria and gelatinase activity based on aggregation and dissolution of gold nanoparticles</i> Mortezaei, M; Dadmehr, M; (...); Ramshini, H JOURNAL OF MICROBIOLOGICAL METHODS Volume 191 Article Number 106349 Published DEC 2021	$(10 + 20 \times 2.622)/8 = 7.81$
<i>Nanoparticle-assisted detection of nucleic acids in a polymeric nanopore with a large pore size</i> Zhang, YW; Chen, XH; (...); Guan, XY BIOSENSORS & BIOELECTRONICS Volume 196 Article Number 113697 Published JAN 15 2022	$(10 + 20 \times 12.545)/8 = 32.61$



<i>Sub-10-nm-thick SiN nanopore membranes fabricated using the SiO₂ sacrificial layer process</i> Yanagi, I and Takeda, KINANOTECHNOLOGY Volume 32 Issue 41 Article umber 415301 Published OCT 8 2021	$(10+ 20 \times 3.953)/8 = 11.13$
<i>Nanomaterial-based biosensors for COVID-19 detection</i> Al-Douri, Y; Khan, MM; (...); Abd El-Rehim, AF CRITICAL REVIEWS IN SOLID STATE AND MATERIALS SCIENCES Volume 47 Issue 6 Page 955-978 Published NOV 2 2022	$(10+ 20 \times 11.178)/8 = 29.20$
<i>Recent advances in biological nanopores for nanopore sequencing, sensing and comparison of functional variations in MspA mutants</i> Bhatti, H; Jawed, R; (...); Liu, QJ RSC ADVANCES Volume 11 Issue 46 Page 28996-29014 Published SEP 8 2021	$(10+ 20 \times 4.036)/8 = 11.34$
<i>Single-molecule, hybridization-based strategies for short nucleic acids detection and recognition with nanopores</i> Luchian, T; Mereuta, L; (...); Schiopu, I PROTEOMICS Volume 22 Issue 5-6 Special Issue SI Article Numbere 2100046 Published MAR 2022	$(10+ 20 \times 5.393)/8 = 14.73$
<i>Recent advances in ionic current rectification based nanopore sensing: a mini-review</i> Zhang, SJ; Chen, W; (...); Zhao, YD ENSORS AND ACTUATORS REPORTS Volume 3 Article Number 100042 Published NOV 2021	$(10+ 20 \times 0.67)/8 = 2.93$
<i>Biological nanopores elucidate the differences between isomers of mercaptobenzoic-capped gold clusters</i> Cox, BD; Martin, CR; (...); Reiner, JE PHYSICAL CHEMISTRY CHEMICAL PHYSICS Volume 23 Issue 13 Page 7938-7947 Published APR 7 2021	$(10+ 20 \times 3.945)/8 = 11.11$
Lucrare: Isabela S. Dragomir[†], Ioana C. Bucataru[†], Irina Schiopu, Tudor Luchian, "Unzipping mechanism of free- and polyarginine-conjugated DNA-PNA duplexes, preconfin ed inside the α-hemolysin nanopore", <i>Analytical Chemistry</i> 2020, ([†]contribuții egale), factor de impact: 6.986 Citată în:	
<i>Overview of the materials design and sensing strategies of nanopore devices</i> Liang, LY; Qin, FP; (...); Astruc, D, COORDINATION CHEMISTRY REVIEWS Volume 478 Article Number 214998 Published MAR 1 2023	$(10+ 20 \times 24.833)/4 = 126.67$
<i>Nanopore electrochemical measurement for single molecular interactions and beyond</i> Yu, RJ; Chen, KL; (...); Long, YT, CURRENT OPINION IN ELECTROCHEMISTRY Volume 35 Article Number 101063 Published OCT 2022	$(10+ 20 \times 7.664)/4 = 40.82$
<i>A Single-Molecule Insight into the Ionic Strength-dependent, Cationic Peptide Nucleic Acids-Oligonucleotides Interactions</i> , Asandei, A; Mereuta, L; (...); Luchian, T, CHEMISTRY-AN ASIAN JOURNAL Volume 17 Issue 12 Article Numbere 202200261 Published JUN 15 2022	$(10+ 20 \times 4.839)/4 = 26.70$
<i>Exponential Increase in an Ionic Signal: A Dominant Role of the Space Charge Effect on the Outer Surface of Nanochannels</i> , Wu, XQ; Li, Y; (...); Xia, F ANALYTICAL CHEMISTRY Volume 93 Issue40 Page 13711-13718 Published OCT 12 2021	$(10+ 20 \times 8.008)/4 = 42.54$



<i>Recent advances in biological nanopores for nanopore sequencing, sensing and comparison of functional variations in MspA mutants</i> Bhatti, H; Jawed, R; (...); Liu, QJ RSC ADVANCES Volume 11 Issue 46 Page 28996-29014 Published SEP 8 2021	$(10+ 20 \times 4.036)/4 = 22.68$
<i>Harnessing biological nanopore technology to track chemical changes</i> By: Yin, Yun-Dong; Zhang, Long; Leng, Xuan-Zheng; et al. TRAC-TRENDS IN ANALYTICAL CHEMISTRY Volume: 133 Article Number: 116091 Published: DEC 2020	$(10+ 20 \times 12.296)/4 = 63.98$
<i>Analytical Model for Particle Capture in Nanopores Elucidates Competition among Electrophoresis, Electroosmosis, and Dielectrophoresis</i> By: Chinappi, Mauro; Yamaji, Misa; Kawano, Ryuji; et al. ACS NANO Volume: 14 Issue: 11 Pages: 15816-15828 Published: NOV 24 2020	$(10+ 20 \times 15.881)/4 = 81.91$
Lucrare: Alina Asandei, Giovanni Di Muccio, Irina Schiopu, Loredana Mereuta, <u>Isabela S. Dragomir</u> , Mauro Chinappi, Tudor Luchian, "Nanopore-Based Protein Sequencing Using Biopores: Current Achievements and Open Challenges", Asandei, A; Di Muccio, G; Schiopu, I; Mereuta, L; <u>Dragomir, IS</u> ; Chinappi, M; Luchian, T , Small Methods 2020, 1900595, factor de impact: 14.188 Citată în:	
<i>Overview of the materials design and sensing strategies of nanopore devices</i> Liang, LY; Qin, FP; (...); Astruc, D COORDINATION CHEMISTRY REVIEWS Volume 478 Article Number 214998 Published MAR 1 2023	$(10+ 20 \times 24.833)/7 = 72.38$
<i>Assembly of transmembrane pores from mirror-image peptides</i> Krishnan, RS; Jana, K; (...); Mahendran, KR NATURE COMMUNICATIONS Volume 13 Issue 1 Article Number 5377 Published SEP 14 2022	$(10+ 20 \times 17.694)/7 = 51.98$
<i>Resolving Isomeric Posttranslational Modifications Using a Biological Nanopore as a Sensor of Molecular Shape</i> Ensslen, T; Sarthak, K; (...); Behrends, JC JOURNAL OF THE AMERICAN CHEMICAL SOCIETY Volume 144 Issue 35 Page 16060-16068 Published SEP 7 2022	$(10+ 20 \times 16.383)/7 = 48.24$
<i>Aerolysin nanopore-based identification of proteinogenic amino acids using a bipolar peptide probe</i> Ge, YX; Cui, MJ; (...); Xi, DM NANOSCALE ADVANCES Volume 4 Issue 18 Page 3883-3891 Published SEP 13 2022	$(10+ 20 \times 5.598)/7 = 17.42$
<i>Polypeptide analysis for nanopore-based protein identification</i> Bakshloo, MA; Yahiaoui, S; (...); Oukhaled, A NANO RESEARCH Volume 15 Issue 11 Page 9831-9842 Special Issue SI Published NOV 2022	$(10+ 20 \times 10.269)/7 = 30.77$
<i>A Critical Review on the Sensing, Control, and Manipulation of Single Molecules on Optofluidic Devices</i> Rahman, M; Islam, KR; (...); Alam, SMM MICROMACHINES Volume 13 Issue 6 Article Number 968 Published JUN 2022	$(10+ 20 \times 3.523)/7 = 11.49$



<i>beta-Barrel Nanopores with an Acidic-Aromatic Sensing Region Identify Proteinogenic Peptides at Low pH</i> Versloot, RCA; Straathof, SAP; (...); Maglia, G ACS NANO Volume 16 Issue 5 Page 7258-7268 Published MAY 24 2022	$(10+ 20 \times 18.027)/7 = 52.93$
<i>Changes in Salt Concentration Modify the Translocation of Neutral Molecules through a Delta CymA Nanopore in a Non-monotonic Manner</i> Prajapati, JD; Pangen, S; (...); Kleinekathofer, U ACS NANO Volume 16 Issue 5 Page 7701-7712 Published MAY 24 2022	$(10+ 20 \times 18.027)/7 = 52.93$
<i>Oligonucleotide Discrimination Enabled by Tannic Acid-Coordinated Film-Coated Solid-State Nanopores</i> Wei, GH; Hu, R; (...); Zhao, QLANGMUIR Volume 38 Issue 20 Page 6443-6453 Published MAY 24 2022	$(10+ 20 \times 4.331)/7 = 13.80$
<i>On possible trypsin-induced biases in peptides analysis with aerolysin nanopore</i> Bakshloo, MA; Yahiaoui, S; (...); Oukhaled, APROTEOMICS Volume 22 Issue 11-12 Article Number 2100056 Published JUN 2022	$(10+ 20 \times 5.393)/7 = 16.84$
<i>Label-Free Optical Analysis of Biomolecules in Solid-State Nanopores: Toward Single-Molecule Protein Sequencing</i> Zhao, YQ; Iarossi, M; (...); De Angelis, FACS PHOTONICS Volume 9 Issue 3 Page 730-742 Published MAR 16 2022	$(10+ 20 \times 7.077)/7 = 21.65$
<i>Dielectric Manipulation of Polymer Translocation Dynamics in Engineered Membrane Nanopores</i> Buyukdagli, S LANGMUIR Volume 38 Issue 1 Page 122-131 Published JAN 11 2022	$(10+ 20 \times 4.331)/7 = 13.80$
<i>An advanced optical-electrochemical nanopore measurement system for single-molecule analysis</i> Liu, SC; Xie, BK; (...); Long, YTREVIEW OF SCIENTIFIC INSTRUMENTS Volume 92 Issue 12 Article Number 121301 Published DEC 1 2021	$(10+ 20 \times 1.843)/7 = 6.69$
<i>Solid-state and polymer nanopores for protein sensing: A review</i> Meyer, N; Abrao-Nemeir, I; (...); Balme, SADVANCES IN COLLOID AND INTERFACE SCIENCE Volume 298 Article Number 102561 Published DEC 2021	$(10+ 20 \times 15.19)/7 = 44.83$
<i>Exponential Increase in an Ionic Signal: A Dominant Role of the Space Charge Effect on the Outer Surface of Nanochannels</i> Wu, XQ; Li, Y; (...); Xia, FANALYTICAL CHEMISTRY Volume 93 Issue 40 Page 13711-13718 Published OCT 12 2021	$(10+ 20 \times 8.008)/7 = 24.54$
<i>Herding cats: Label-based approaches in protein translocation through nanopore sensors for single-molecule protein sequence analysis</i> Motone, K; Cardozo, N and Nivala, JISCIENCE Volume 24 Issue 9 Published SEP 24 2021	$(10+ 20 \times 6.107)/7 = 18.88$
<i>Enzyme Hinders HIV-1 Tat Viral Transport and Real-Time Measured with Nanopores</i> Wang, H; Huang, WL; (...); Wang, LACS SENSORS Volume 6 Issue 10 Page 3781-3788 Published OCT 22 2021	$(10+ 20 \times 9.618)/7 = 28.91$
<i>Unveiling the Microscopic Mechanism of Current Variation in the Sensing Region of the MspA Nanopore for DNA Sequencing</i> Yu, M; Si, W; (...); Dong, YLJOURNAL OF PHYSICAL CHEMISTRY LETTERS Volume 12 Issue 37 Page 9132-9141 Published SEP 23 2021	$(10+ 20 \times 6.888)/7 = 21.11$



<i>Velocity control of protein translocation through a nanopore by tuning the fraction of benzenoid residues</i> Si, W; Yang, HJ; (...); Sha, JJ NANOSCALE Volume 13 Issue 36 Page 15352-15361 Published SEP 28 2021	$(10+ 20 \times 8.307)/7 = 25.16$
<i>Advances in electrochemical detection for probing protein aggregation</i> Andreescu, S and Vasilescu, A CURRENT OPINION IN ELECTROCHEMISTRY Volume 30 Article Number 100820 Published DEC 2021	$(10+ 20 \times 7.664)/7 = 23.33$
<i>Single-molecule, hybridization-based strategies for short nucleic acids detection and recognition with nanopores</i> Luchian, T; Mereuta, L; (...); Schiopu, I, PROTEOMICS, Volume 22 Issue 5-6 Special Issue SI Published MAR 2022	$(10+ 20 \times 5.393)/7 = 16.84$
<i>Recent advances in top-down proteome sample processing ahead of MS analysis</i> , Nickerson, JL; Baghalabadi, V; (...); Doucette, AA, MASS SPECTROMETRY REVIEWS, Volume 42 Issue 2 Page 457-495 Published MAR 2023	$(10+ 20 \times 9.011)/7 = 27.17$
<i>Towards population-scale long-read sequencing</i> , De Coster, W; Weissensteiner, MH and Sedlazeck, FJ, NATURE REVIEWS GENETICS, Volume 22 Issue 9 Page 572-587, Published SEP 2021	$(10+ 20 \times 59.924)/7 = 172.64$
<i>Regulating the Translocation of DNA through Poly(N-isopropylacrylamide)-Decorated Switchable Nanopores by Cononsolvency Effect</i> , Yong, HS; Molcette, B; (...); Sommer, JU, MACROMOLECULES, Volume 54, Issue 9, Page 4432-4442, Published MAY 11 2021	$(10+ 20 \times 6.057)/7 = 18.73$
<i>Biological Nanopore Approach for Single-Molecule Protein Sequencing</i> , Hu, Zheng-Li; Huo, Ming-Zhu; Ying, Yi-Lun; et al. ANGEWANDTE CHEMIE-INTERNATIONAL EDITION, Volume 60 Issue 27 Page 14738-14749 Published JUN 25 2021	$(10+ 20 \times 16.823)/7 = 49.49$
<i>Simultaneous Sensing of Force and Current Signals to Recognize Proteinogenic Amino Acids at a Single-Molecule Level</i> , Huang, Changxiong; Zhu, Xiaohong; Li, Na; et al. JOURNAL OF PHYSICAL CHEMISTRY LETTERS Volume: 12 Issue: 2 Pages: 793-799 Published: JAN 21 2021	$(10+ 20 \times 6.888)/7 = 21.11$
<i>Nanopores: a versatile tool to study protein dynamics</i> , Schmid, S and Dekker, C, ESSAYS IN BIOCHEMISTRY, Book Series Essays in Biochemistry, Volume 65 Issue 1 Page 93-107 Published 2021	$(10+ 20 \times 7.258)/7 = 22.17$
<i>Non-Receptor-Mediated Lipid Membrane Permeabilization by the SARS-CoV-2 Spike Protein S1 Subunit</i> , Asandei, Alina; Mereuta, Loredana; Schiopu, Irina; et al. ACS APPLIED MATERIALS & INTERFACES Volume: 12 Issue: 50 Pages: 55649-55658 Published: DEC 16 2020	$(10+ 20 \times 9.229)/7 = 27.80$
<i>Peptide-Based Identification of Phytophthora Isolates and Phytophthora Detection in Planta</i> , Berka, Miroslav; Greplova, Marie; Saiz-Fernandez, Inigo; et al. INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES Volume: 21 Issue: 24 Article Number: 9463 Published: DEC 2020	$(10+ 20 \times 5.924)/7 = 18.35$



<i>Voltage-Dependent Transport of Neutral Solutes through Nanopores: A Molecular View</i> , Prajapati, Jigneshkumar Dahyabhai; Kleinekathoefer, Ulrich JOURNAL OF PHYSICAL CHEMISTRY B Volume: 124 Issue: 47 Pages: 10718-10731 Published: NOV 25 2020	$(10 + 20 \times 2.991)/7 = 9.97$
<i>Unveiling the Heterogenous Dephosphorylation of DNA Using an Aerolysin Nanopore</i> , Li, Meng-Yin; Ying, Yi-Lun; Li, Shuang; et al. ACS NANO Volume: 14 Issue: 10 Pages: 12571-12578 Published: OCT 27 2020	$(10 + 20 \times 15.881)/7 = 46.80$
<i>Machine Learning to Improve the Sensing of Biomolecules by Conical Track-Etched Nanopore</i> , Meyer, Nathan; Janot, Jean-Marc; Lepoitevin, Mathilde; et al. BIOSENSORS-BASEL Volume: 10 Issue: 10 Article Number: 140 Published: OCT 2020	$(10 + 20 \times 5.519)/7 = 17.20$
<i>Enabling nanopore technology for sensing individual amino acids by a derivatization strategy</i> , Wei, Xiaojun; Ma, Dumei; Jing, Lihong; et al., JOURNAL OF MATERIALS CHEMISTRY B Volume: 8 Issue: 31 Pages: 6792-6797 Published: AUG 21 2020	$(10 + 20 \times 6.331)/7 = 19.52$
<i>The Promise of Nanopore Technology: Advances in the Discrimination of Protein Sequences and Chemical Modifications</i> , Cressiot, Benjamin; Bacri, Laurent; Pelta, Juan SMALL METHODS Volume: 4 Issue: 11 Special Issue: SI Article Number: 2000090 Published: NOV 2020	$(10 + 20 \times 14.188)/7 = 41.97$
<i>Application of Solid-State Nanopore in Protein Detection</i> , Luo, Yuhang; Wu, Linlin; Tu, Jing; et al. INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES Volume: 21 Issue: 8 Article Number: 2808 Published: APR 2020	$(10 + 20 \times 5.924)/7 = 18.35$
Lucrare: Corina Ciobanasu, Isabela S. Dragomir , Aurelia Apetrei, <i>The penetrating properties of the tumor homing peptide LyP-1 in model lipid membrane</i> , Journal of Peptide Science 2019, 25(3), e3145 , factor de impact: 1.877 Citată în:	
<i>Polypharmacological Cell-Penetrating Peptides from Venomous Marine Animals Based on Immunomodulating, Antimicrobial, and Anticancer Properties</i> , Hemmati, S and Kazerooni, HR, MARINE DRUGS, Volume 20 Issue 12 Article Number 763 Published DEC 2022	$(10 + 20 \times 6.085)/3 = 43.90$
<i>Confocal Laser Scanning Microscopy and Model Membranes to Study Translocation Mechanisms of Membrane Active Peptides</i> , Ciobanasu, C, PHARMACEUTICS, Volume 14 Issue 8 Article Number 1699 Published AUG 2022	$(10 + 20 \times 6.525)/3 = 46.83$
<i>Dynamic Electrochemiluminescence Imaging of Single Giant Liposome Opening at Polarized Electrodes</i> , Ben Trad, F; Wieczny, V; (...); Buriez, O, ANALYTICAL CHEMISTRY, Volume 94 Issue 3 Page 1686-1696 Published JAN 25 2022	$(10 + 20 \times 8.008)/3 = 56.72$



<i>Different Approaches to Cyclize a Cell-Penetrating Peptide and to Tether Bioactive Payloads</i> , Feni, L; Neundorf, I, PEPTIDE MACROCYCLES, Book Series Methods in Molecular Biology, Book Subtitle Methods and Protocols, Page 375-389, Published 2022	$(10+ 20 \times 0.368)/3 = 5.79$
<i>Dual Blood-Brain Barrier-Glioma Targeting Peptide-Poly(levodopamine) Hybrid Nanoplatfoms as Potential Near Infrared Phototheranostic Agents in Glioblastoma</i> , Dube, T; Kumar, N; Bishnoi, M; Panda, JJ, BIOCONJUGATE CHEMISTRY Volume 32 Issue 9 Page 2014-2031 Published SEP 2021	$(10+ 20 \times 6.069)/3= 43.79$
<i>Applications of amphipathic and cationic cyclic cell-penetrating peptides: Significant therapeutic delivery tool</i> , Sajid, MI; Moazzam, M; Stueber, R; Park, SE; Cho, Y; Malik, NU; Tiwari, RK; PEPTIDES, Volume 141 Article Number 170542 Published JUL2021	$(10+ 20 \times 3.867)/3= 29.11$
<i>Peptides-based therapy and diagnosis. Strategies for non-invasive therapies in cancer</i> , Ciobanasu, Corina, JOURNAL OF DRUG TARGETING; 29(10):1063-1079, Dec 2021	$(10+ 20 \times 5.016)/3= 36.77$
<i>New generation of cell-penetrating peptides: Functionality and potential clinical application</i> , Reissmann, Siegmund; Filatova, Margarita P., JOURNAL OF PEPTIDE SCIENCE Volume: 27 Issue: 5 Article Number: e3300 Published: MAY 2021 Early Access: FEB 2021	$(10+ 20 \times 2.408)/3= 19.39$
<i>Characterization and targeting ability evaluation of cell-penetrating peptide LyP-1 modified alginate-based nanoparticles</i> , Zhong, Zhirong; Cai, Liang; Li, Chunhong RSC ADVANCES Volume: 10 Issue: 54 Pages: 32443-32449 Published: SEP 6 2020	$(10+ 20 \times 3.361)/3= 25.74$
<i>Engineered targeting tLyp-1 exosomes as gene therapy vectors for efficient delivery of siRNA into lung cancer cells</i> , Bai, Jing; Duan, Jialun; Liu, Rui; et al. ASIAN JOURNAL OF PHARMACEUTICAL SCIENCES Volume: 15 Issue: 4 Pages: 461-471 Published: JUL 2020	$(10+ 20 \times 6.598)/3= 47.32$
<i>Lipid Membrane Permeability of Synthetic Redox DMPC Liposomes Investigated by Single Electrochemical Collisions</i> , Lebegue, Estelle; Barriere, Frederic; Bard, Allen J. ANALYTICAL CHEMISTRY Volume: 92 Issue: 3 Pages: 2401-2408 Published: FEB 4 2020	$(10+ 20 \times 6.986)/3 = 49.91$
<i>Rapid Microfluidic Preparation of Niosomes for Targeted Drug Delivery</i> , Selec, Didem Ag; Maurer, Viktor; Stahl, Frank; et al. INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES Volume: 20 Issue: 19 Article Number: 4696 Published: OCT 2019	$(10+ 20 \times 4.556)/3 = 33.71$
Lucrare: <i>Single-Molecule Dynamics and Discrimination between Hydrophilic and Hydrophobic Amino Acids in Peptides, through Controllable, Stepwise Translocation across Nanopores</i> , Alina Asandei, <u>Isabela S. Dragomir</u> , Giovanni Di Muccio, Mauro Chinappi, Yoonkyung Park, Tudor Luchian, Polymers 2018 , 10(8), 885, factor de impact: 3.164 Citată în:	



<i>De novo profiling of insect-resistant proteins of rice via nanopore peptide differentiation</i> , Xiao, YC; Ren, JS ; Wang, YJ ; Chen, XH; Zhou, S; Li, MH ; Gao, F; Liang, LY; Wang, DQ; Ren, GJ; Wang, L, BIOSENSORS & BIOELECTRONICS Volume 212 Article Number 114415 Published SEP 2022	$(10 + 20 \times 12.545)/6 = 43.48$
<i>Biological nanopores for sensing applications</i> , Zhang, M; Chen, C; Zhang, YJ; Geng, J, PROTEINS-STRUCTURE FUNCTION AND BIOINFORMATICS, Volume90 Issue10 Page1786-1799 Published OCT 2022	$(10 + 20 \times 4.088)/6 = 15.29$
<i>Velocity control of protein translocation through a nanopore by tuning the fraction of benzenoid residues</i> , Si, W; Yang, HJ; Wu, GS; Zhang, Y; Sha, JJ, NANOSCALE, 13 (36) , pp.15352-15361, Published Sep 28 2021	$(10 + 20 \times 8.307)/6 = 29.36$
<i>Strategies for Development of a Next-Generation Protein Sequencing Platform</i> , Callahan, Nicholas; Tullman, Jennifer; Kelman, Zvi; Marino, J, TRENDS IN BIOCHEMICAL SCIENCES Volume: 45 Issue: 1 Pages: 76-89 Published: JAN 2020	$(10 + 20 \times 13.807)/6 = 47.69$
<i>Translocation of non-interacting heteropolymer protein chains in terms of single helical propensity and size</i> , Olivares-Quiroz, L.; Antonio Velez-Perez, Jose, BIOCHIMICA ET BIOPHYSICA ACTA-PROTEINS AND PROTEOMICS Volume: 1867 Issue: 6 Pages: 565-574 Published: JUN 2019	$(10 + 20 \times 2.371)/6 = 9.57$
<i>Insights into protein sequencing with an alpha-Hemolysin nanopore by atomistic simulations</i> , Di Muccio, Giovanni; Rossini, Aldo Eugenio; Di Marino, Daniele; Zollo, Giuseppe; Chinappi, Mauro, SCIENTIFIC REPORTS Volume: 9 Article Number: 6440 Published: APR 23 2019	$(10 + 20 \times 3.998)/6 = 14.99$
Punctaj total citări	2304.86
13. Lucrări susținute în calitate de invitat la manifestări științifice (conferințe, congrese, simpozioane, seminarii și ateliere de lucru)	Țară: 10 puncte pentru fiecare activitate
Conferința națională a doctoranzilor din Consorțiul Universitaria pentru domeniile Matematică, Informatică, Fizică CSDCU-MIF 2020 Isabela S Dragomir , Alina Asandei, Corina Ciobănașu, Irina Schiopu, Ioana Cezara Bucataru, Tudor Luchian, <i>Studiul interacțiunilor dintre molecule de interes biologic și sisteme lipido-proteice model</i> – invited oral presentation	10
14. Profesor/cercetător invitat la universități/institute de cercetare	-
15. Editor/Membru în <i>Editorial Board & Advisory Board</i>	-
16. Premii internaționale obținute printr-un proces de selecție	100 puncte / categorie / număr persoane



Best Poster Award , The Fifth Edition of International Conference on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences ” IC-ANMBES 2018”, Brașov, România: Alina Asandei, Isabela S. Dragomir , Tudor Luchian, Aldo E. Rossini, Mauro Chinappi, Yoonkyung Park, <i>Readout of Small Peptides Primary Structure, with a Protein Nanopore</i>	100/1/6 = 16.67
17. Premii ale Academiei Române	-
18. Alte premii naționale ale instituțiilor culturale	20 puncte / categorie / număr persoane
Best Poster Award , Conferința Națională de Biofizică, ediția a 5a, CNB 2018, București, România Isabela S. Dragomir , Alina Asandei, Tudor Luchian, Aldo E. Rossini, Mauro Chinappi, Yoonkyung Park, <i>Fingerprinting of Selected Amino Acids from Engineered Polypeptides using an α-Hemolysin Nanopore</i>	20/1/6 = 3.34
Premiul I , Conferința Națională Fizica și Tehnologiile Educaționale Moderne FTEM Mai 2016, Iași Isabela S. Dragomir , Aurelia Apetrei, Corina Ciobănașu, <i>Microscopia de fluorescență la nivel de singură moleculă aplicată în studiul peptidelor membranelor active</i>	20/1/3 = 6.67
Mențiune , Concursul Național Studentesc de Fizică Dragomir Hurmuzescu, ediția a IV-a, Martie 2015, Craiova Dragomir Isabela , Aurelia Apetrei, <i>Investigarea la nivel unimolecular a interacțiunii dintre peptide și nanopori proteici</i>	20/4/2 = 2.5
Premiul III , Conferința Națională Fizica și Tehnologiile Educaționale Moderne FTEM Mai 2014, Iași Dragomir Isabela , Filip Andreea, Aurelia Apetrei, Loredana Mereuță, <i>A lipid protein system useful for the study of biomolecules at the single-molecule level</i>	20/3/4 = 1.67
19. Participări la manifestări științifice	Internaționale: raportor pe secțiuni/paneluri, 10 puncte pentru fiecare activitate. Naționale: raportor pe secțiuni/paneluri, 2 puncte pentru fiecare activitate
N: Conferința Națională de Biofizică, Ediția a 17-a, 09/2022, Târgu Mureș, România, Isabela S. Dragomir , Alina Asandei, Irina Schiopu, Ioana C. Bucataru, Loredana Mereuta, Tudor Luchian, „A tug-of-war between electric forces: The nanopore-tweezing method applied in molecular sensing”	
I: The 6th Int. Conference on Analytical and Nanoanalytical Methods for Biomedical and Environment, 06/2022, Brașov, România Isabela S. Dragomir , Alina Asandei, Irina Schiopu, Ioana C. Bucataru, Loredana Mereuta, Tudor Luchian, „Detection of nucleobases on short functionalized peptide-nucleic acid sequences using nanopore-tweezing method”	



N: Conferința Scolilor Doctorale din Cadrul Universității "Alexandru Ioan Cuza" din Iași – POCU 2020, Iași, România: Isabela S Dragomir , Alina Asandei, Tudor Luchian, <i>Discriminarea între secvențe nucleotidice scurte cu ajutorul nanoporului de α-HL</i>	$(4 I \times 10) + (11 N \times 2) =$ $40 + 22 =$ 62 puncte
N: Conferința Națională de Biofizică, Ediția a 16-a 2020 – online, România: Ioana C. Bucataru, Isabela S. Dragomir , Irina Schiopu, Tudor Luchian, <i>Nanopore-based investigation of PNA-DNA duplexes unzipping mechanism</i>	
I: The 12th International Conference PIM, Processes in Isotopes and Molecules 2019, Cluj Napoca, România: - Isabela S. Dragomir , A. Asandei, I. C. Bucătaru, G. Di Muccio, M. Chinappi, Y. Park, T. Luchian, <i>Nanoscopic investigation of hydrophilic and hydrophobic amino acids-containing peptides interaction with the α-HL nanopore</i> Isabela S. Dragomir , C. Ciobănașu, A. Apetrei and T. Luchian, <i>Interaction of tumor-homing peptides with lipid membranes</i>	
I: The 12th EBSA/The 10th ICBP-IUPAP Biophysics Congress 2019, Biophysics for Life and Technology, Madrid, Spain: Isabela S. Dragomir , A. Asandei, A. Ciucă, G. Di Muccio, M. Chinappi, Y. Park, T. Luchian, <i>Sidedness-Dependence of Current Fluctuations Caused by Serine-Containing Peptides Interacting with the α-HL Nanopore</i>	
N: Conferința Națională de Biofizică, ediția a 5a, CNB 2018, București, România: Isabela S. Dragomir , Alina Asandei, Tudor Luchian, Aldo E. Rossini, Mauro Chinappi, Yoonkyung Park, <i>Fingerprinting of Selected Amino Acids from Engineered Polypeptides using an α-Hemolysin Nanopore</i>	
I: International Conference on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences IC-ANMBES 2018 May, Brașov, Romania: - Alina Asandei, Isabela S. Dragomir , Tudor Luchian, Aldo E. Rossini, Mauro Chinappi, Yoonkyung Park, <i>Readout of Small Peptides Primary Structure, with a Protein Nanopore</i> - Corina Ciobanasu, Isabela S. Dragomir , Aurelia Apetrei, Tudor Luchian, <i>Penetrating Properties of LyP-1 Homing Peptides in Giant Unilamellar Vesicles</i>	
N: Conferința Națională Fizica și Tehnologiile Educaționale Moderne FTEM Mai 2017: Isabela S. Dragomir , Corina Ciobănașu, Aurelia Apetrei, <i>Studiul influenței compoziției lipidice a membranelor biomimetice asupra mobilității peptidei antimicrobiene LL-37 prin microscopie de fluorescență la nivel de singură moleculă</i>	



N: Conferința Națională Fizica și Tehnologiile Educaționale Moderne FTEM Mai 2016:	
- Isabela S. Dragomir , Aurelia Apetrei, Corina Ciobănașu, <i>Microscopia de fluorescență la nivel de singură moleculă aplicată în studiul peptidelor membranar active</i>	
- Isabela S. Dragomir , <u>Diana Teodorescu-Perijoc</u> , Aurelia Apetrei, Corina Ciobănașu, <i>Studiul interacțiunii dintre peptida antimicrobiană LL-37 și membrane biomimetice prin microscopie de fluorescență la nivel de singură moleculă</i>	
N: Conferința de Comunicări Științifice Studențești FarPhys Octombrie 2015: Isabela S. Dragomir , Ciucă Andrei, Aurelia Apetrei, Corina Ciobănașu, <i>Interacțiunea dintre peptidele antimicrobiene marcate fluorescent și membrane biomimetice bacteriene</i>	
N: Conferința Națională Fizica și Tehnologiile Educaționale Moderne FTEM Mai 2015: Isabela S. Dragomir , Aurelia Apetrei, <i>Determinarea selectivității ionice a unui nanopor hibrid format dintr-un por proteic de α-hemolizină și o moleculă de ciclodextrină</i>	
N: Concursul Național Studențesc de Fizică Dragomir Hurmuzescu, ediția a IV-a, Martie 2015, Craiova: Isabela S. Dragomir , Aurelia Apetrei, <i>Investigarea la nivel unimolecular a interacțiunii dintre peptide și nanopori proteici</i>	
N: Conferința de Comunicări Științifice Studențești FarPhys Octombrie 2014: Isabela S. Dragomir , Aurelia Apetrei, <i>Influența tăriei ionice asupra interacțiunii dintre peptide cationice și porul proteic de α-hemolizină</i>	
N: Conferința Națională Fizica și Tehnologiile Educaționale Moderne FTEM Mai 2014: Isabela S. Dragomir , Filip Andreea, Aurelia Apetrei, Loredana Mereuță, <i>A lipid protein system useful for the study of biomolecules at the single-molecule level</i>	
TOTAL PUNCTAJ	2998.76

Data:

10.05.2023

Semnătura:

Dr. Isabela-Ștefania BUDACĂ-DRAGOMIR