Lista competă de lucrări științifice

Profesor univ. dr. Tudor Luchian

10 lucrări reprezentative, publicate în calitate de 'autor principal':

1. Alina Asandei, Giovanni Di Muccio, Irina Schiopu, Loredana Mereuta, Isabela S. Dragomir, Mauro Chinappi, **Tudor Luchian**, Nanopore-Based Protein Sequencing Using Biopores: Current Achievements and Open Challenges, **Small Methods**, 2020, 1900595, DOI: 10.1002/smtd.201900595 (**IF =12.13**)
2. Loredana Mereuta, Alina Asandei, Irina Schiopu, Yoonkyung Park, **Tudor Luchian**, Nanopore-Assisted, Sequence-Specific Detection and Single-Molecule Hybridization Analysis of Short, Single-Stranded DNAs, **Analytical Chemistry**, 2019, 91, 13, 8630-8637 (**IF = 6.78**)
3. Alina Asandei, Loredana Mereuta, Jonggwan Park, Chang Ho Seo, Yoonkyung Park, **Tudor Luchian**, Non-Functionalized PNAs as Beacons for Nucleic Acids Detection in a Nanopore System, **ACS Sensors**, 2019, 4, 6, 1502-1507 (**IF = 7.33**)
4. **Tudor Luchian**, Yoonkyung Park, Alina Asandei, Irina Schiopu, Loredana Mereuta, Aurelia Apetrei, Nanoscale Probing of Informational Polymers with Nanopores. Applications to Amyloidogenic Fragments, Peptides and DNA-PNA Hybrids, **Accounts of Chemical Research**, 2019, 52 (1), pp 267–276 (**IF = 20.83**)
5. Andrei Ciuca, Alina Asandei, Irina Schiopu, Aurelia Apetrei, Loredana Mereuta, Chang Ho Seo, Yoonkyung Park, **Tudor Luchian**, Single Molecule, Real-Time Dissecting of Peptide Nucleic Acids-DNA Duplexes with a Protein Nanopore Tweezer, **Analytical Chemistry**, 2018, 90 (12), pp 7682–7690 (**IF = 6.78**)
6. Alina Asandei, Irina Schiopu, Mauro Chinappi, Chang Ho Seo, Yoonkyung Park, T**udor Luchian**, Electroosmotic Trap Against the Electrophoretic Force Near a Protein Nanopore Reveals Peptide Dynamics During Capture and Translocation, **ACS Applied Materials & Interfaces**, 2016, 8 (20), pp 13166–13179 (**IF = 8.75**)
7. Alina Asandei, Mauro Chinappi, Hee-Kyoung Kang, Chang Ho Seo , Loredana Mereuta, Yoonkyung Park, **Tudor Luchian,** Acidity-Mediated, Electrostatic Tuning of Asymmetrically Charged Peptides Interactions with Protein Nanopores, **ACS Applied Materials & Interfaces**, 2015, 7 (30), pp 16706–

16714 (**IF = 8.75**)

8. Alina Asandei, Mauro Chinappi, Jong-kook Lee, Chang Ho Seo, Loredana Mereuta, Yoonkyung Park, **Tudor Luchian**, Placement of oppositely charged aminoacids at a polypeptide termini determines the voltage-controlled braking of polymer transport through nanometer-scale pores, **Scientific Reports (Nature Publishing Group)** 5, 10419; DOI: 10.1038/srep10419 (2015) (**IF = 3.99**)
9. Loredana Mereuta, Alina Asandei, Chang Ho Seo, Yoonkyung Park, **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,** 2014, 6 (15), pp 13242–13256 (**IF = 8.75**)
10. Loredana Mereuta, Mahua Roy, Alina Asandei, Jong Kook Lee, Yoonkyung Park,Ioan Andricioaei, **Tudor Luchian**, Slowing down single-molecule trafficking through a protein nanopore reveals intermediates for peptide translocation, **Scientific Reports (Nature Publishing Group)**, 2014, Jan 27;4:3885. DOI: 10.1038/srep03885. (**IF = 3.99**)

Brevete obţinute în întreaga activitate

1. Hagan Bayley**,** Seong-Ho Shin**, Tudor Luchian,** Steve Cheley **– '**New system comprising a sensing device, a protein pore, a detection system and an ionic solution containing a reactive analyte capable of covalently bonding to the protein probe, useful for sensing a reactive analyte in a solution', Patent Number(s): WO2003095669-A; WO2003095669-A1; US2003215881-A1; AU2003245272-A1; EP1504114-A1
2. PARK Y, **LUCHIAN T**, APETREI A, CIUCA A - 'Sensor for detecting bacteria within aqueous sample, has container for containing fluid included with electrolyte, and measuring apparatus for measuring change of electric signal between first fluid compartment and second fluid compartment', Patent Number(s): KR2018108281-A; KR1909446-B1, Patent Assignee Name(s) and Code(s): UNIV CHOSUN IND ACADEMIC COOP FOUND(CHOS-C), Derwent Primary Accession Number: 2018-783708

Cărți și capitole de cărți

1. Tudor Luchian – *'**Electrofiziologie moleculară. Teorie și aplicații'**, Sedcom-Libris Publishing House, Iași, 2006* (ISBN: 973-670-154-9)
2. Hagan Bayley, Tudor Luchian, Seong-Ho Shin, Mackay Steffensen – ***'Single-molecule covalent chemistry in a protein nanoreactor', Springer Series in Biophysics "Single Molecules and Nanotechnology" Rigler & Vogel eds.**, 2008 (*capitol*), 251-277*
3. Tudor Luchian – '***Functional nanopores in artificial membranes – it takes at least two to tango'***, Advances in Micro- and Nanoengineering, 6, 42-53, 2004 (capitol)
4. Tudor Luchian – ***'Introducere în biofizica moleculară și celulară'***, *'Alexandru Ioan Cuza' University Publishing House*, Iași, 2001

Articole/studii selectate, publicate in extenso, în reviste din circuitul științific international-ISI Clarivate

1. Loredana Mereuta, Alina Asandei, Isabela S. Dragomir, Ioana C. Bucataru, Jonggwan Park, Chang Ho Seo, Yoonkyung Park, **Tudor Luchian**, Sequence-Specific Detection of Single-Stranded DNA with a Gold Nanoparticle-Protein Nanopore Approach, *Scientific Reports (Springer-Nature)*, 2020, in press
2. Isabela S. Dragomir, Ioana C. Bucataru, Irina Schiopu, **Tudor Luchian**, Unzipping mechanism of free- and polyarginine-conjugated DNA-PNA duplexes, preconfined inside the α-hemolysin nanopore, *Analytical Chemistry*, 2020, in press, DOI: https://doi.org/10.1021/acs.analchem.0c00976
3. Su Jin Ko, Eunji Park, Alina Asandei, Jee-Young Choi, Seung-Chul Lee, Chang Ho Seo, **Tudor Luchian**, Yoonkyung Park, Bee venom-derived antimicrobial peptide melectin has broad-spectrum potency, cell selectivity, and salt-resistant properties, *Scientific Reports (Springer Nature)*, volume 10, Article number: 10145 (2020)
4. Alina Asandei, Giovanni Di Muccio, Irina Schiopu, Loredana Mereuta, Isabela S. Dragomir, Mauro Chinappi, **Tudor Luchian**, Nanopore-Based Protein Sequencing Using Biopores: Current Achievements and Open Challenges, *Small Methods*, 2020, 1900595, DOI: 10.1002/smtd.201900595

5. Jong-kook Lee, Loredana Mereuta, **Tudor Luchian**, Yoonkyung Park, Antimicrobial Peptide HPA3NT3-A2 Effectively Inhibits Biofilm Formation in Mice Infected with Drug-Resistant Bacteria, *Biomaterials Science*, 2019, 7(12), pp. 5068-5083
6. Ju Young Kwon, Min Kyung Kim, Loredana Mereuta, Chang Ho Seo, **Tudor Luchian** and Yoonkyung Park, Mechanism of action of antimicrobial peptide P5 truncations against Pseudomonas aeruginosa and Staphylococcus aureus, *AMB Express*, 2019, 9:122, https://doi.org/10.1186/s13568-019-0843-0
7. Loredana Mereuta, Alina Asandei, Irina Schiopu, Yoonkyung Park, **Tudor Luchian**, Nanopore-Assisted, Sequence-Specific Detection and Single-Molecule Hybridization Analysis of Short, Single-Stranded DNAs, *Analytical Chemistry*, 2019, 91, 13, 8630-8637
8. Alina Asandei, Loredana Mereuta, Jonggwan Park, Chang Ho Seo, Yoonkyung Park, **Tudor Luchian**, Non-Functionalized PNAs as Beacons for Nucleic Acids Detection in a Nanopore System, *ACS Sensors*, 2019, 4, 6, 1502-1507
9. **Tudor Luchian**, Yoonkyung Park, Alina Asandei, Irina Schiopu, Loredana Mereuta, Aurelia Apetrei, Nanoscale Probing of Informational Polymers with Nanopores. Applications to Amyloidogenic Fragments, Peptides and DNA-PNA Hybrids, *Accounts of Chemical Research*, 2019, 52 (1), pp 267–276
10. Kang HK, Seo CH, **Luchian T**, Park Y., Pse-T2, an antimicrobial peptide with High-Level, Broad-Spectrum Antimicrobial Potency and Skin Biocompatibility against Multidrug-resistant Pseudomonas aeruginosa infection, *Antimicrobial Agents and Chemotherapy*, 2018 Oct 15. pii: AAC.01493-18. doi: 10.1128/AAC.01493-18.
11. Alina Asandei, Isabela S. Dragomir, Giovanni Di Muccio, Mauro Chinappi, Yoonkyung Park, **Tudor Luchian**, Single-Molecule Dynamics and Discrimination between Hydrophilic and Hydrophobic Amino Acids in Peptides, through Controllable, Stepwise Translocation across Nanopores, *Polymers*, 2018, 10, 885; doi:10.3390/polym10080885
12. Andrei Ciuca, Alina Asandei, Irina Schiopu, Aurelia Apetrei, Loredana Mereuta, Chang Ho Seo, Yoonkyung Park, **Tudor Luchian**, Single Molecule, Real-Time Dissecting of Peptide Nucleic Acids-DNA Duplexes with a Protein Nanopore Tweezer, *Analytical Chemistry*, 2018, 90 (12), pp 7682–7690
13. Eugene Cho, Jong-kook Lee, Eunji Park, Chang Ho Seo, **Tudor Luchian** and Yoonkyung Park**,** Antitumor activity of HPA3P through RIPK3-dependent regulated necrotic cell death in colon cancer**,** *Oncotarget***,** 2018

14. Su Jin Ko, Min Kyung Kim, Jeong Kyu Bang, Chang Ho Seo, **Tudor Luchian** & Yoonkyung Park, Macropis fulvipes Venom component Macropin Exerts its Antibacterial and Anti-Biofilm Properties by Damaging the Plasma Membranes of Drug Resistant Bacteria, *Scientific Reports* 7, Article number: 16580, 2017, doi:10.1038/s41598-017-16784-6
15. Alina Asandei, Aldo E. Rossini, Mauro Chinappi, Yoonkyung Park, **Tudor Luchian**, Protein Nanopore-Based Discrimination Between Selected Neutral Amino Acids from Polypeptides, *Langmuir*, 2017, DOI: 10.1021/acs.langmuir.7b03163
16. Hyo Mi Han, Sujin Ko, Min-Ju Cheong, Jeong Kyu Bang, Chang Ho Seo, **Tudor Luchian**, Yoonkyung Park, Myxinidin2 and myxinidin3 suppress inflammatory responses through STAT3 and MAPKs to promote wound healing, *Oncotarget*, 2017, https://doi.org/10.18632/oncotarget.20908, Vol 8, No 50, 87582-87597
17. Alina Asandei, Irina Schiopu, Corina Ciobanasu, Yoonkyung Park, **Tudor Luchian**, If Squeezed, a Camel Passes Through the Eye of a Needle. Voltage-Mediated Stretching of Dendrimers Facilitates Passage Through a Nanopore, *Journal of Membrane Biology*, accepted, https://doi.org/10.1007/s00232-017-9999-1, 2017
18. Alina Asandei , Andrei Ciuca, Aurelia Apetrei , Irina Schiopu, Loreana Mereuta, Chang Ho Seo, Yoonkyung Park, **Tudor Luchian**, Nanoscale Investigation of Generation 1 PAMAM Dendrimers Interaction with a Protein Nanopore**.** *Scientific Reports* 7, Article number: 6167 (2017), doi:10.1038/s41598-017-06435-1
19. Aurelia Apetrei, Andrei Ciuca, Jong-kook Lee, Chang Ho Seo,Yoonkyung Park, **Tudor Luchian**, A Protein Nanopore-Based Approach for Bacteria Sensing, *Nanoscale Research Letters*, 2016, 11:501, DOI: 10.1186/s11671-016-1715-z
20. 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*, 2016, *8* (20), pp 13166–13179
21. Jong-kook Lee, **Tudor Luchian,** Yoonkyung Park, Effect of Regular Exercise on Inflammation Induced by Drug-resistant Staphylococcus aureus 3089 in ICR mice, *Scientific Reports (Nature Publishing Group)*, **5**, 16364; DOI: 10.1038/srep16364 (2015)
22. Jong-kook Lee, Chang Ho Seo, **Tudor Luchian**, Yoonkyung Park, The antimicrobial peptide CMA3 derived from the CA-MA hybrid peptide: antibacterial and anti-inflammatory activities with low cytotoxicity and mechanism of action in Escherichia coli, *Antimicrobial Agents and*

Chemotherapy Accepted manuscript posted online 9 November 2015, DOI:10.1128/AAC.01998-15

23. 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*, 2015, *7* (30), pp 16706–16714
24. Mauro Chinappi, Tudor Luchian, Fabio Cecconi, *Nanopore tweezers: voltage controlled trapping and releasing of analytes*, *Physical Review E* 2015, 92, 032714
25. Alina Asandei, Mauro Chinappi, Jong-kook Lee, Chang Ho Seo, Loredana Mereuta, Yoonkyung Park, **Tudor Luchian**, Placement of oppositely charged aminoacids at a polypeptide termini determines the voltage-controlled braking of polymer transport through nanometer-scale pores, *Scientific Reports (Nature Publishing Group)* **5**, 10419; DOI: 10.1038/srep10419 (2015)
26. Irina Schiopu, Sorana Iftemi, **Tudor Luchian,** Nanopore Investigation of the Stereoselective Interactions between Cu2+ and D,L-Histidine Amino Acids Engineered into an Amyloidic Fragment Analogue**,** *Langmuir***,** 2015**,** 31(1), pp. 387-396
27. Loredana Mereuta, Alina Asandei, Chang Ho Seo, Yoonkyung Park, **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*, 2014, *6* (15), pp 13242–13256
28. 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*, 2014 Jul;11(7):1069-77. DOI: 10.1002/cbdv.201300334.
29. 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, *Journal of Membrane Biology*, 2014, Jun;247(6):523-30. DOI: 10.1007/s00232-014-9662-z
30. Loredana Mereuta, Mahua Roy, Alina Asandei, Jong Kook Lee, Yoonkyung Park,Ioan Andricioaei, **Tudor Luchian**, Slowing down single-molecule trafficking through a protein

nanopore reveals intermediates for peptide translocation, *Scientific Reports (Nature Publishing Group)*, 2014, Jan 27;4:3885. DOI: 10.1038/srep03885.

31. Alina Asandei, Irina Schiopu, Sorana Iftemi, Loredana Mereuta, **Tudor Luchian**, Investigation of Cu^{2+} binding to human and rat amyloid fragments Aβ (1-16) with a protein nanopore, *Langmuir*, 2013, 29 (50) , pp. 15634-1564
32. Loredana Mereuta, Irina Schiopu, Alina Asandei, Yoonkyung Park, Kyung-Soo Hahm, **Tudor Luchian**, Protein nanopore-based, single-molecule exploration of copper binding to an antimicrobial-derived, histidine-containing chimera peptide, *Langmuir*, 2012, **DOI:** 10.1021/la303782d
33. Elisa Campos, Alina Asandei, Colin Edward McVey, Joao C. Dias, A. Sofia F. Oliveira, Claudio Manuel Soares, **Tudor Luchian**, Yann Astier, The Role of Lys147 in the Interaction between MPSA-Gold Nanoparticles and the α-Hemolysin Nanopore, *Langmuir*, 2012, **DOI:** 10.1021/la302613g
34. Irina Schiopu, Loredana Mereuta, Aurelia Apetrei, Yoonkyung Park, Kyung-Soo Hahm, **Tudor Luchian**, The role of thryptophan spatial arrangement for antimicrobial-derived, membrane-active peptides adsorption and activity, *Molecular BioSystems*, 2012, DOI:10.1039/c2mb25221j
35. Alina Asandei, Loredana Mereuta, **Tudor Luchian**, The Kinetics of Ampicillin Complexation by γ-Cyclodextrins. A Single Molecule Approach, *The Journal of Physical Chemistry B*, 2011, 115 (33), 10173–10181
36. Loredana Mereuta, Alina Asandei, **Tudor Luchian**, Meet me on the other side: trans-bilayer modulation of a model voltage-gated ion channel activity by membrane electrostatics asymmetry, *PLoS One*, 2011, 6(9): e25276. doi:10.1371/journal.pone.0025276
37. Alina Asandei, Aurelia Apetrei, **Tudor Luchian**, Uni-molecular detection and quantification of selected β-lactam antibiotics with a hybrid α-haemolysin protein pore, *Journal of Molecular Recognition*, 2011, 24 (2), 199-207
38. Alina Asandei, Aurelia Apetrei, Yoonkyung Park, Kyung-Soo Hahm, **Tudor Luchian,** Investigation of Single-Molecule Kinetics Mediated by Weak Hydrogen-Bonds Within a Biological Nanopore, *Langmuir*, 2011, 27 (1), 19-24
39. Aurelia Apetrei, Alina Asandei, Yoonkyung Park, Kyung-Soo Hahm, Mathias Winterhalter, **Tudor Luchian**, Unimolecular study of the interaction between the outer membrane protein OmpF from E. coli and an analogue of the HP(2–20) antimicrobial peptide, *Journal of Bioenergetics and Biomembranes*, 2010, 42(2), pp. 173-180

40. Aurelia Apetrei, Loredana Mereuta, **Tudor Luchian**, The RH 421 styryl dye induced, pore model-dependent modulation of antimicrobial peptides activity in reconstituted planar membranes, *Biochimica et Biophysica Acta – General Subjects*, 2009, 1790 (8), 809-816
41. Loredana Mereuta, **Tudor Luchian**, Yoonkyung Park, Kyung-Soo Hahm,The modulatory role played by lipids unsaturation upon the membrane interaction and translocation of an analogue (HPA3) of the HP(2–20) antimicrobial peptide, *Journal of Bioenergetics and Biomembranes*, 2009, 41, 79-84
42. Roxana Chiriac, **Tudor Luchian,** Single-molecule investigation of the influence played by lipid rafts on ion transport and dynamic features of the pore-forming alamethicin oligomer, *Journal of Membrane Biology*, 2008, 224, 45-54
43. Alina Asandei, **Tudor Luchian**, Ion selectivity, transport properties and dynamics of amphotericin B channels studied over a wide range of acidity changes**,** 2008, *Colloids and Surfaces B: Biointerfaces*, 67, 99–106
44. Loredana Mereuta, **Tudor Luchian**, Yoonkyung Park, Kyung-Soo Hahm, Single-molecule investigation of the interactions between reconstituted planar lipid membranes and an analogue of the HP(2–20) antimicrobial peptide, *Biochemical and Biophysical Research Communications*, 2008, 373(4), 467-472
45. Alina Asandei, Loredana Mereuta, **Tudor Luchian**, Influence of membrane potentials upon reversible protonation of acidic residues from the OmpF eyelet, *Biophysical Chemistry*, 2008, 135, 32–40
46. Roxana Chiriac, **Tudor Luchian**, pH modulation of transport properties of alamethicin oligomers inserted in zwitterionic-based artificial lipid membranes, *Biophysical Chemistry*, 130, 139-147, 2007
47. **Tudor Luchian**, Loredana Mereuta, Phlorizin- and 6-Ketocholestanol-Mediated Antagonistic Modulation of Alamethicin Activity in Phospholipid Planar Membranes, *Langmuir*, 2006, *22*, 8452-8457
48. Loredana Mereuta, **Tudor Luchian**, A virtual instrumentation based protocol for the automated implementation of the inner field compensation method, *Central European Journal of Physics*, 2006, 4(3), 299-416
49. **Tudor Luchian,** Loredana Mereuta, Selective transfer of energy through an alamethicin-doped artificial lipid membrane studied at discrete molecular level, *Bioelectrochemistry* 69 (2006) 94–98

50. Loredana Mereuta, **Tudor Luchian**, How could a chirp be more effective than a louder clock – resonant transfer of energy between subthreshold excitation pulses and excitable tissues, *Journal of Cellular and Molecular Medicine*, 9:2, 446-456, 2005
51. **Tudor Luchian,** An automated method for generating analogic signals that embody the Markov kinetics of model ionic channels, *Journal of Neuroscience Methods*, 147(1), 8-14, 2005
52. **Tudor Luchian**, The modulatory effect of calcium ions upon alamethicin monomers uptake on artificial phospholipid membranes, *Journal of Biological Physics*, 31, 23-33, 2005
53. Seong-Ho Shin, **Tudor Luchian**, Steve Cheley, Orit Braha, Hagan Bayley , Reversible covalent chemistry in a protein-based nano-reactor at the single molecule level, *Biophysical J.* 84 (2): 125A-125A Part 2 Suppl. S FEB 2003
54. **Tudor Luchian**, Seong Ho Shin, Hagan Bayley, Single-molecule chemistry with spatially separated reactants, *Angewandte Chemie International Edition*, 42, 3766-3771 , 2003
55. **Tudor Luchian**, Seong Ho Shin, Hagan Bayley, Kinetics of a three-step reaction observed at the single-molecule level, *Angewandte Chemie International Edition* 42, 1925-1929, 2003 (**reviewed in C & En News, May 5, 2003**
56. Seong-Ho Shin, **Tudor Luchian**, Steve Cheley, Orit Braha, Hagan Bayley**,** Kinetics of a reversible covalent-bond-forming reaction observed at the single-molecule level, *Angewandte Chemie International Edition*, 41 (19): 3707-3709, 2002 (**reviewed in Nature –** science update**, 7 October 2003**)
57. **Tudor Luchian,** The influence exerted by the β_3 subunit on MVIIA binding to neuronal N-type calcium channels, *BBA-Biomembranes*, 1512:2, 329-334, 2001
58. Richard J. Lewis, Katherine J. Nielsen, David J. Craik, Marion L. Loghnan, Denise A. Adams, Iain A. Sharpe, **Tudor Luchian,** David J. Adams, Trudy Bond, Linda Thomas, Alun Jones, Jodi L. Matheson, Roger Drinkwater, Peter R. Andrews, Paul F. Alewood, Novel ω-conotoxins from Conus Catus discriminate among neuronal calcium channel subtypes, *Journal of Biological Chemistry*, 275:45, 35335-35344, 2000
59. **Tudor Luchian**, Wolfgang Schreibmayer, Ion permeation through a G protein-activated, inwardly rectigying K^+ channel, *BBA-Biomembranes*, 1368, 167-170, 1997
60. **Tudor Luchian**, Nathan Dascal, Carmen Dessauer, Dieter Platzer, Norman Davidson, Henry Lester, Wolfgang Schreibmayer, A C-terminal peptide of the GIRK1 subunit directly blocks the G protein-activated K^+ channel (GIRK1) expressed in Xenopus oocytes, *J. Physiology (London*), 505.1, 13-22, 1997 (**reviewed in J. Physiology), 505.1, 1997**

61. **Tudor Luchian**, Nathan Dascal, Norman Davidson, Henry A. Lester, Wolfgang Schreibmayer, Single channel analysis of block of the G-protein activated potassium channel from rat atrium (KGA/GIRK1) by the C-terminal peptide, *Biophysical J.* (2): TU278-TU278 Part 2 FEB 1996
62. **Tudor Luchian**, Zsolt Tokaji, Zsolt Dancshazy, Actinic light density dependence of the O intermediate of the photocycle of bacteriorhodopsin, *FEBS Lett*. 386, 55-59, 1996

Publicații ce vizează politica științei, selectate, peer-reviewed

1. Tudor Luchian, Balkan science: how to halt the brain drain**, *Nature,* 2011, 470 (7334), 333-333.**
2. Tudor Luchian, Romanian funding cuts calls for more stringent criteria**, *Nature,* 2009, 458, 1101.**
3. Tudor Luchian**, Rolul pierdut al științelor exacte și interdisciplinare în excelența intelectuală și economică a României, *Pentru excelența în Știința Românească,* Editori: Petre T. Frangopol, Nicolae Zamfir, Tibor Braun, Bucuresti Martie 26, 2008, Casa Carții de Știință Cluj Napoca.**

Prezentări orale selectate

1. **'***Nanoscopic interrogation of molecular interactions with protein nanopores*', **Invited talk at IRTG Soft Matter Science, University of Freiburg, Dec 10, 2014**
2. Tudor Luchian, Loredana Mereuta, Irina Schiopu, Alina Asandei, Sorana Iftemi and Aurelia Apetrei, **Nanoscopic 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*, June 13th-15th, 2014, Brasov, Romania (**invited keynote presentation**).
3. 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, USA 6/21/2015 - 6/-26/2015
4. Sorana Iftemi, Irina Schiopu, and Tudor Luchian, '*Uni-molecular Investigation of metals-D,L-Histidines Interactions with a Protein Nanopore*', ***EBSA 2015 10th European Biophysics Congress***, July 18 to 22, 2015- Dresden, Germany

5. '*Single-molecule electrophysiology investigation of selected pharmacological molecules interaction with protein pores and lipids*'**, Invited talk at the Institute of Physical and Theoretical Chemistry of the Rheinische Friedrich-Wilhelms Bonn University, 23-26 Nov. 2010**

Lucrări selectate prezentate la conferințe naționale și internaționale

1. 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*, June 13th-15th, 2014, Brasov, Romania (poster presentation – best poster award).
2. 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*, 21-26 Iunie, 2015, Boston, SUA, (poster presentation).
3. Alina Asandei, Mauro Chinappi, Hee-Kyoung Kang, Chang Ho Seo, Loredana Mereuta, Yoonkyung Park, Tudor Luchian, **pH-Dependent Interaction of Asymmetrically Charged Peptides with a Protein Nanopore**, *The 41st FEBS Congress*, 3 – 8 Septembrie, 2016, Ephesus / Kuşadası, Turcia, (poster presentation).
4. Andrei Ciucă, Alina Asandei, Aurelia Apetrei, Irina Șchiopu, Loredana Mereuță, Chang Ho Seo, Yoonkyung Park, Tudor Luchian, **Uni-molecular study of the pH- and salt-dependent PAMAM dendrimers-α-hemolysin nanopore interactions**, *19th IUPAB congress and 11th EBSA congress*, July 16-20, Edinburgh, UK (poster presentation).
5. Isabela Dragomir, Alina Asandei, Tudor Luchian, **Discriminating between Selected Neutral Aminoacids Flanked by Segments of Oppositely Charged Aminoacids Using a Protein Nanopore** *"IC-ANMBES 2018"* 21-23 MAI 2018 Brasov, Romania (poster presentation – best poster award).
6. Alina Asandei, Aldo E. Rossini, Mauro Chinappi, Yoonkyung Park, Tudor Luchian, **Readout of Peptides Primary Structure at Nanoscale**, *Nanofluidics in physics and biology* Institut Français de l'Education" on the ENS de Lyon Campus 9-12 july 2018 Lyon France (poster presentation).

7. Mauro Chinappi, Alina Asandei, Fabio Cecconi, Tudor Luchian, **Capture and traslocation control of molecules inside nanopores** *Nanofluidics in physics and biology* Institut Français de l'Education" on the ENS de Lyon Campus 9-12 july 2018 Lyon France (oral presentation).
8. Andrei Ciuca, Alina Asandei, Irina Schiopu, Loredana Mereuta, Chang Ho Seo, Yoonkyung Park and Tudor Luchian, **Catch me, hug me, break me. Detecting and rupturing single PNA-DNA duplexes with a protein nanopore**. *Single-Molecule Sensors and NanoSystems International Conference - S3IC 2019*, Munchen, Germania 3.04 – 5.04.2019 (poster presentation).
9. Irina Schiopu, Ioana Cezara Bucataru, Tudor Luchian, Chang Ho Seo, Yoonkyung Park, **Electrophoretic migration of PAMAM G1 dendrimers into confined nano-spaces: a single-molecule assay**, *12th EBSA 10th ICBP-IUPAP Biophysics Congress*, July 20-24, 2019, Madrid, Spain (poster presentation).
10. Isabela S. Dragomir, Alina Asandei, Andrei Ciucă, Giovanni Di Muccio, Mauro Chinappi, Yoonkyung Park, Tudor Luchian, **Sidedness-Dependence of Current Fluctuations Caused by Serine-Containing Peptides Interacting with the α-HL Nanopore**, *The 12th EBSA/10th ICBP-IUPAP Congress,* July 20-24, 2019, Madrid, Spain (poster presentation).
11. Loredana Mereuta, Alina Asandei, Irina Schiopu, Yoonkyung Park, Tudor Luchian, **Hybridization-Based Detection and Validation of ssDNA fragments, with a Protein Nanopore** *Single Molecule Protein Sequencing* Inbal Hotel, Jerusalem /Technion - Israel Institute of Technology, 16.09 - 20.09.2019 Ierusalim. Israel (poster presentation).
12. Irina Schiopu, Ioana Cezara Bucataru, Tudor Luchian, Chang Ho Seo and Yoonkyung Park, **Nanoscale investigation of low generation PAMAM dendrimers**, *The 12th International Conference, Processes In Isotopes And Molecules, PIM* 25-27 September 2019, Cluj-Napoca, Romania (poster presentation).
13. Isabela S Dragomir, Alina Asandei, Ioana C Bucătaru, Giovanni Di Muccio, Mauro Chinappi, Yoonkyung Park, Tudor Luchian, **Nanoscopic investigation of hydrophilic and hydrophobic amino acids-containing peptides interaction with the a-HL nanopore**, *The 12th International Conference, Processes In Isotopes And Molecules, PIM* 25-27 September 2019, Cluj-Napoca, Romania (poster presentation).

Lista citărilor după Scopus (complet), ISI Thomson (prima pagină conținând sinteza) și Google Scholar (prima pagină conținând sinteza)

(a se vedea atasate)