

## Conf. univ. dr. Loredana Cristina MEREUȚĂ - Lista de lucrări

[<https://www.webofscience.com>; <https://www.scopus.com>]

1. *Teaching an old dog new tricks: A lipid membrane-based electric immunosensor for real-time probing of the spike S-1 protein subunit from SARS-CoV-2*; By: Asandei, A (Asandei, Alina) **Mereuta, L (Mereuta, Loredana)** Schiopu, I (Schiopu, Irina) Park, Y (Park, Yoonkyung) Luchian, T (Luchian, Tudor) **PROTEOMICS 2021** Article Number e2100047
2. *Single-molecule, hybridization-based strategies for short nucleic acids detection and recognition with nanopores* By: Luchian, T (Luchian, Tudor) **Mereuta, L (Mereuta, Loredana)** Park, Y (Park, Yoonkyung) Asandei, A (Asandei, Alina) Schiopu, I (Schiopu, Irina) **PROTEOMICS 2021** Article Number e2100046
3. *The Nanopore-Tweezing-Based, Targeted Detection of Nucleobases on Short Functionalized Peptide Nucleic Acid Sequences* By: Dragomir, IS (Dragomir, Isabela S.) Asandei, A (Asandei, Alina) Schiopu, I (Schiopu, Irina) Bucataru, IC (Bucataru, Ioana C.) **Mereuta, L (Mereuta, Loredana)** Luchian, T (Luchian, Tudor) **POLYMERS 2021** Volume 13 Issue 8
4. *SINGLE-MOLECULE DETECTION AND MANIPULATION WITH BIOLOGICAL NANOPORES* By: Schiopu, I (Schiopu, Irina) Asandei, A (Asandei, Alina) **Mereuta, L (Mereuta, Loredana)** Dragomir, I (Dragomir, Isabela) Bucataru, C (Bucataru, Cezara) Luchian, T (Luchian, Tudor) **STUDIA UNIVERSITATIS BABES-BOLYAI CHEMIA 2021** Volume 66 Issue 3 Page 161-174
5. *Non-Receptor-Mediated Lipid Membrane Permeabilization by the SARS-CoV-2 Spike Protein S1 Subunit* By: Asandei, A (Asandei, Alina) **Mereuta, L (Mereuta, Loredana)** Schiopu, I (Schiopu, Irina) Park, J (Park, Jonggwan) Seo, CH (Seo, Chang Ho) Park, Y (Park, Yoonkyung) Luchian, T (Luchian, Tudor) **ACS APPLIED MATERIALS & INTERFACES 2020** Volume 12 Issue 50 Page 55649-55658
6. *Sequence-specific detection of single-stranded DNA with a gold nanoparticle-protein nanopore approach* By: **Mereuta, L (Mereuta, Loredana)** Asandei, A (Asandei, Alina) Dragomir, IS (Dragomir, Isabela S.) Bucataru, IC (Bucataru, Ioana C.) Park, J (Park, Jonggwan) Seo, CH (Seo, Chang Ho) Park, Y (Park, Yoonkyung) Luchian, T (Luchian, Tudor) **SCIENTIFIC REPORTS 2020** Volume 10 Issue 1
7. *Nanopore-Based Protein Sequencing Using Biopores: Current Achievements and Open Challenges* By: Asandei, A (Asandei, Alina) Di Muccio, G (Di Muccio, Giovanni) Schiopu, I (Schiopu, Irina) **Mereuta, L (Mereuta, Loredana)** Dragomir, IS (Dragomir, Isabela S.) Chinappi, M (Chinappi, Mauro) Luchian, T (Luchian, Tudor) **SMALL METHODS 2020** Volume 4 Issue 11

8. *Antimicrobial peptide HPA3NT3-A2 effectively inhibits biofilm formation in mice infected with drug-resistant bacteria*  
By: Lee, JK (Lee, Jong-Kook) **Mereuta, L (Mereuta, Loredana)** Luchian, T (Luchian, Tudor) Park, Y (Park, Yoonkyung)  
**BIOMATERIALS SCIENCE** **2019** Volume7 Issue12 Page5068-5083
9. *Mechanism of action of antimicrobial peptide P5 truncations against *Pseudomonas aeruginosa* and *Staphylococcus aureus**  
By: Kwon, JY (Kwon, Ju Young) Kim, MK (Kim, Min Kyung) **Mereuta, L (Mereuta, Loredana)** Seo, CH (Seo, Chang Ho) Luchian, T (Luchian, Tudor) Park, Y (Park, Yoonkyung) **AMB EXPRESS** **2019** Volume9 Article Number122
10. *Nanopore-Assisted, Sequence-Specific Detection, and Single-Molecule Hybridization Analysis of Short, Single-Stranded DNAs*  
By: **Mereuta, L (Mereuta, Loredana)** Asandei, A (Asandei, Alina) Schiopu, I (Schiopu, Irina) Park, Y (Park, Yoonkyung) Luchian, T (Luchian, Tudor) **ANALYTICAL CHEMISTRY** **2019** Volume91Issue13Page8630-8637
11. *Nonfunctionalized PNAs as Beacons for Nucleic Acid Detection in a Nanopore System*  
By: Asandei, A (Asandei, Alina) **Mereuta, L (Mereuta, Loredana)** Park, J (Park, Jonggwan) Seo, CH (Seo, Chang Ho) Park, Y (Park, Yoonkyung) Luchian, T (Luchian, Tudor) **ACS SENSORS** **2019** Volume4 Issue6 Page1502-1507
12. *Nanoscale Probing of Informational Polymers with Nanopores. Applications to Amyloidogenic Fragments, Peptides, and DNA-PNA Hybrids*  
By: Luchian, T (Luchian, Tudor) Park, Y (Park, Yoonkyung) Asandei, A (Asandei, Alina) Schiopu, I (Schiopu, Irina) **Mereuta, L (Mereuta, Loredana)** Apetrei, A (Apetrei, Aurelia) **ACCOUNTS OF CHEMICAL RESEARCH** **2019** Volume52 Issue1Page267-276
13. *Single-Molecule, Real-Time Dissecting of Peptide Nucleic Acid-DNA Duplexes with a Protein Nanopore Tweezer*, Ciucă, Andrei; Asandei, Alina; Schiopu, Irina; Apetrei, Aurelia; **Mereuta, Loredana**; Seo, Chang Ho; Park, Yoonkyung; Luchian, Tudor , **ANALYTICAL CHEMISTRY** **2018** Volume 90 Issue 12 Page 7682-7690
14. *Nanoscale Investigation of Generation 1 PAMAM Dendrimers Interaction with a Protein Nanopore*; Asandei, Alina; Ciucă, Andrei ; Apetrei, Aurelia ; Schiopu, Irina ; **Mereuta, Loredana** ; Seo, Chang Ho ; Park, Yoonkyung ; Luchian, Tudor ; **SCIENTIFIC REPORTS** **2017** Volume 7
15. *Acidity-Mediated, Electrostatic Tuning of Asymmetrically Charged Peptides Interactions with Protein Nanopores*; Asandei, Alina ; Chinappi, Mauro ; Kang, Hee-Kyoung ; Seo, Chang Ho ; **Mereuta, Loredana** ; Park, Yoonkyung ; Luchian, Tudor; **ACS APPLIED MATERIALS & INTERFACES** **2015** Volume 7 Issue 30 Page 16706-16714
16. *Placement of oppositely charged aminoacids at a polypeptide termini determines the voltage-controlled braking of polymer transport through nanometer-scale pores*; Asandei, Alina ; Chinappi, Mauro ; Lee, Jong-Kook ; Seo, Chang Ho ; Mereuta, Loredana ; Park, Yoonkyung ; Luchian, Tudor ; **SCIENTIFIC REPORTS** **2015** Volume 5
17. *Quantitative Understanding of pH- and Salt-Mediated Conformational Folding of Histidine-Containing, beta-Hairpin-like Peptides, through Single-Molecule Probing with Protein Nanopores*; **Mereuta, Loredana** ; Asandei, Alina ; Seo,

Chang Ho ; Park, Yoonkyung ; Luchian, Tudor ; ACS APPLIED MATERIALS & INTERFACES 2014 Volume 6 Issue 15 Page 13242-13256

18. *Slowing down single-molecule trafficking through a protein nanopore reveals intermediates for peptide translocation;* Mereuta, Loredana ; Roy, Mahua ; Asandei, Alina ; Lee, Jong Kook ; Park, Yoonkyung ; Andricioaei, Ioan ; Luchian, Tudor ; SCIENTIFIC REPORTS 2014 Volume 4
19. *Probing of Various Physiologically Relevant Metals: Amyloid-beta Peptide Interactions with a Lipid Membrane-Immobilized Protein Nanopore;* Asandei, Alina ; Iftemi, Sorana ; Mereuta, Loredana ; Schiopu, Irina ; Luchian, Tudor ; JOURNAL OF MEMBRANE BIOLOGY 2014 Volume 247 Issue 6 Page 523-530
20. *Investigation of Cu<sup>2+</sup> Binding to Human and Rat Amyloid Fragments A beta (1-16) with a Protein Nanopore;* Asandei, Alina ; Schiopu, Irina ; Iftemi, Sorana ; Mereuta, Loredana ; Luchian, Tudor ; LANGMUIR 2013; Volume 29 Issue 50 Page 15634-15642
21. *Protein Nanopore-Based, Single-Molecule Exploration of Copper Binding to an Antimicrobial-Derived, Histidine-Containing Chimera Peptide;* Mereuta, Loredana ; Schiopu, Irina ; Asandei, Alina ; Park, Yoonkyung ; Hahm, Kyung-Soo ; Luchian, Tudor ; LANGMUIR 2012 Volume 28 Issue 49 Page 17079-17091
22. *The role of tryptophan spatial arrangement for antimicrobial-derived, membrane-active peptides adsorption and activity;* Schiopu, Irina ; Mereuta, Loredana ; Apetrei, Aurelia ; Park, Yoonkyung ; Hahm, Kyung-Soo ; Luchian, Tudor ; MOLECULAR BIOSYSTEMS 2012 Volume 8 Issue 11 Page 2860-2863
23. *Meet Me on the Other Side: Trans-Bilayer Modulation of a Model Voltage-Gated Ion Channel Activity by Membrane Electrostatics Asymmetry;* Mereuta, Loredana ; Asandei, Alina ; Luchian, Tudor ; PLOS ONE 2011 Volume 6 Issue 9
24. *The Kinetics of Ampicillin Complexation by gamma-Cyclodextrins. A Single Molecule Approach;* Asandei, Alina ; Mereuta, Loredana ; Luchian, Tudor ; JOURNAL OF PHYSICAL CHEMISTRY B 2011 Volume 115 Issue 33 Page 10173-10181
25. *The RH 421 styryl dye induced, pore model-dependent modulation of antimicrobial peptides activity in reconstituted planar membranes;* Apetrei, Aurelia ; Mereuta, Loredana ; Luchian, Tudor ; BIOCHIMICA ET BIOPHYSICA ACTA-GENERAL SUBJECTS 2009 Volume 1790 Issue 8 Page 809-816
26. *The role played by lipids unsaturation upon the membrane interaction of the Helicobacter pylori HP(2-20) antimicrobial peptide analogue HPA3;* Mereuta, Loredana ; Luchian, Tudor ; Park, Yoonkyung ; Hahm, Kyung-Soo ; JOURNAL OF BIOENERGETICS AND BIOMEMBRANES 2009 Volume 41 Issue 1 Page 79-84
27. *Single-molecule investigation of the interactions between reconstituted planar lipid membranes and an analogue of the HP(2-20) antimicrobial peptide By:* Mereuta, L (Mereuta, Loredana) Luchian, T (Luchian, Tudor)Yoonkyung, P

(Park, Yoonkyung) Hahm, KS (Hahm, Kyung-Soo) BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS  
**2008** Volume373 Issue4 Page467-472

28. *Influence of membrane potentials upon reversible protonation of acidic residues from the OmpF eyelet* By: Asandei, A (Asandei, Alina) **Mereuta, L (Mereuta, Loredana)** Luchian, T (Luchian, Tudor) BIOPHYSICAL CHEMISTRY 2008 Volume135 Issue1-3 Page32-40
29. *Activity modulation of certain ion-pore forming proteins by electric properties of artificial lipid membranes* By: **Mereuta, L (Mereuta, L.)** Chiriac, R (Chiriac, R.) Luchian, T (Luchian, T.) JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS 2008 Volume10 Issue7 Page1837-1842
30. *Phlorizin- and 6-ketocholestanol-mediated antagonistic modulation of alamethicin activity in phospholipid planar membranes* By: Luchian, T (Luchian, Tudor) **Mereuta, L (Mereuta, Loredana)** LANGMUIR 2006 Volume22 Issue20 Page8452-8457
31. *A virtual instrumentation based protocol for the automated implementation of the inner field compensation method* By: **Mereuta, L (Mereuta, Loredana)** Luchian, T (Luchian, Tudor) CENTRAL EUROPEAN JOURNAL OF PHYSICS 2006 Volume4 Issue3 Page405-416
32. *Selective transfer of energy through an alamethicin-doped artificial lipid membrane studied at discrete molecular level* By: Luchian, T (Luchian, Tudor) **Mereuta, L (Mereuta, Loredana)** BIOELECTROCHEMISTRY 2006 Volume69 Issue1 Page94-98
33. *How could a chirp be more effective than a louder clock - resonant transfer of energy between subthreshold excitation pulses and excitable tissues* By: **Mereuta, L (Mereuta, L)** Luchian, T (Luchian, T) JOURNAL OF CELLULAR AND MOLECULAR MEDICINE 2005 Volume9 Issue2 Page446-456