

### CS III Dr. Alina ASANDEI - Lista de lucrări științifice

1. Luchian Tudor, Park Yoonkyung, Asandei Alina, Schiopu Irina, Mereuta Loredana, Apetrei Aurelia. Nanoscale Probing of Informational Polymers with Nanopores. Applications to Amyloidogenic Fragments, Peptides and DNA-PNA Hybrids. *Accounts of Chemical Research Accepted*

**IF = 20.955, AIS = 7.125**

2. **Alina Asandei**, Dragomir Isabela S., Di Muccio Giovanni, Chinappi Mauro, Park Yoonkyung, Luchian Tudor. Single-Molecule Dynamics and Discrimination between Hydrophilic and Hydrophobic Amino Acids in Peptides, through Controllable, Stepwise Translocation across Nanopores. *Polymers* 10(8), 885, (2018).

**IF = 2.935 AIS = 0.7**

3. Ciuca Andrei, Asandei Alina, Schiopu Irina, Apetrei Aurelia, Mereuta Loredana, Seo Chang Ho, Park Yoonkyung, Luchian Tudor. Single Molecule, Real-Time Dissecting of Peptide Nucleic Acids-DNA Duplexes with a Protein Nanopore Tweezer. *Anal. Chem.*, 90, 7682–7690, (2018).

**IF = 6.042 AIS = 1.371**

4. **Alina Asandei**, Schiopu Irina, Ciobanasu Corina, Park Yoonkyung, Luchian Tudor. If Squeezed, a Camel Passes Through the Eye of a Needle: Voltage-Mediated Stretching of Dendrimers Facilitates Passage Through a Nanopore. *J. Membr. Biol.* 251(3), 405-417, (2018).

**IF = 1.638 AIS = 0.456**

5. Alina Asandei, Aldo E Rossini, Mauro Chinappi, Yoonkyung Park, Tudor Luchian. Protein Nanopore-Based Discrimination Between Selected Neutral Amino Acids from Polypeptides. *Langmuir*, 33, 14451–14459 (2017).

**IF = 3.833 AIS = 0.964**

6. **Alina Asandei**, Andrei Ciuca, Aurelia Apetrei, Irina Schiopu, Loredana Mereuta, Chang Ho Seo, Yoonkyung Park, Tudor Luchian, Nanoscale Investigation of Generation 1 PAMAM Dendrimers Interaction with a Protein Nanopore. *Scientific Reports*, 7 (6167), (2017)

**IF = 4.259 AIS = 1.484**

7. **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. *Applied Materials & Interfaces* 8 (20), 13166-13179, (2016).

**IF = 7.145 AIS = 1.462**

8. **Alina Asandei**, Mauro Chinappi, Hee-Kyoung Kang, Chang Ho Seo, Loredana Mereuta, Yoonkyung Park, Tudor Luchian, Acidity-Mediated, Electrostatic Tuning of Asymmetrically Charged Peptides Interactions with Protein Nanopores. *ACS Applied Materials & Interfaces* 7 (30), 16706-16714, (2015).

**IF = 7.145; AIS = 1.462**

9. **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*, 5 (10419), (2015)

**IF = 5.228; AIS = 1.865**

10. Loredana Mereuta, **Alina Asandei**, Chang Ho Seo, Yoonkyung Park, Tudor Luchian, Quantitative Understanding of pH- and Salt-Mediated Conformational Folding of Histidine-Containing, beta-Hairpin-like Peptides, through Single-Molecule Probing with Protein Nanopores. *ACS Applied Materials & Interfaces*, 6, (15), 13242-13256 (2014)

**IF = 6.723; AIS = 1.373**

11. **Alina Asandei**, Sorana Iftemi, Loredana Mereuta, Irina Schiopu, Tudor Luchian, Probing of Various Physiologically Relevant Metals: Amyloid-beta Peptide Interactions with a Lipid Membrane-Immobilized Protein Nanopore, *Journal of Membrane Biology*, 247(6), 523-553 (2014)

**IF = 2.457; AIS = 0.726**

12. 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*, 4 (3885), (2014)

**IF = 5.078; AIS = 2.174**

13. **Alina Asandei**, Irina Schiopu, Sorana Iftemi, Loredana Mereuta, Tudor Luchian, Investigation of Cu<sup>2+</sup> Binding to Human and Rat Amyloid Fragments A beta (1-16) with a Protein Nanopore, *Langmuir*, 29, (50), 15634-15642 (2013)

**IF = 4.384; AIS=1.111**

14. 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*, 28, (49), 17079-17091 (2012)

**IF = 4.187; AIS=1.177**

15. Elisa Campos, **Alina Asandei**, Colin E. McVey, Joao C. Dias, A. Sofia F. Oliveira, Claudio M. Soares, Tudor Luchian, Yann Astier, The Role of Lys147 in the Interaction between MPSA-Gold Nanoparticles and the alpha-Hemolysin Nanopore, *Langmuir*, 28, (44), 15643-15650, (2012)

**IF = 4.187; AIS=1.177**

16. 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*, 6 (9) e25276, (2011)

**IF = 4.092; AIS=1.798**

17. **Alina Asandei**, Loredana Mereuta, Tudor Luchian, The Kinetics of Ampicillin Complexation by gamma-Cyclodextrins. A Single Molecule Approach, *Journal of Physical Chemistry B*, 115 (33), 10173-10181 (2011)

**IF = 3.696; AIS=1.161**

18. **Alina Asandei**, Aurelia Apetrei, Tudor Luchian, Uni-molecular detection and quantification of selected beta-lactam antibiotics with a hybrid alpha-hemolysin protein pore, *Journal of Molecular Recognition*, 24 (2), 199-207 (2011)

**IF = 2.286; AIS=0.892**

19. **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*, 27 (1), 19-24 (2011)

**IF = 4.269; AIS=1.248**

20. Apetrei Aurelia, **Asandei Alina**, Park Yoonkyung, Hahm Kyung-Soo, Winterhalter Mathias, Luchian Tudor 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*, 42, 173-180, (2010)

**IF = 4.015; AIS=1.232**

21. **Alina Asandei**, Tudor Luchian, Ion selectivity, transport properties and dynamics of amphotericin B channels studied over a wide range of acidity changes, *Colloids and Surfaces B: Biointerfaces*, 67, 99–106 (2008)

**IF = 2.593; AIS=0.654**

22. **Alina Asandei**; Loredana Mereuta; Tudor Luchian, Influence of membrane potentials upon reversible protonation of acidic residues from the OmpF eyelet. *Biophysical Chemistry*, 135, 32-40, (2008)

**IF = 2.362; AIS=0.765**

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