

List of Publications (D)

- D41.** L. Movileanu, 2009, Interrogating single proteins through nanopores: challenges and opportunities, *Trends Biotechnol.* **27(6)**, 333-341.
- D40.** S. Biswas, M.M. Mohammad, L. Movileanu and B. van den Berg, 2008, Crystal structure of outer membrane protein OpdK from *Pseudomonas aeruginosa*, *Structure* **16(7)**, 1027-1035.
- D39.** C. Chimere, L. Movileanu, S. Pezeshki, M. Winterhalter, U. Kleinekathöfer, 2008, Transport at the nanoscale: Temperature dependence of ion conductance, *Eur. Biophys. J.* **38(1)**, 121-125.
- D38.** D. Popescu, L. Movileanu and A.G. Popescu, 2008, The behavior of the lipid vesicle under osmotic stress, Chapter 11, *Invited review article*, In: *Mathematical Biology Research Trends*, L.B. Wilson (Ed.), Nova Science Publishers, New York, pp. 275-294.
- D37.** L. Movileanu, 2008, Squeezing a single polypeptide through a nanopore, *Soft Matter* (Highlight Article) **4(5)**, 925-931.
- D36.** M.M. Mohammad and L. Movileanu, 2008, Excursion of a single polypeptide into a protein pore: simple physics, but complicated biology, *Eur. Biophys. J.* **37(6)**, 913-925.
- D35.** M.M. Mohammad, S. Prakash, A. Matouschek and L. Movileanu, 2008, Controlling a single protein in a nanopore through electrostatic traps, *J. Am. Chem. Soc.* **130(12)**, 4081-4088.
- D34.** A.J. Wolfe, M.M. Mohammad, S. Cheley, H. Bayley and L. Movileanu, 2007, Catalyzing the translocation of polypeptides through attractive interactions, *J. Am. Chem. Soc.* **129(45)**, 14034-14041.
- D33.** S. Biswas, M.M. Mohammad, D.R. Patel, L. Movileanu and B. van den Berg, 2007, Structural insight into OprD substrate specificity, *Nature Struct. Mol. Biol.* **14(11)**, 1108-1109.
- D32.** C.P. Goodrich, S. Kirmizialtin, B.M. Huyghues-Despointes, A. Zhu, J.M. Scholtz, D.E. Makarov and L. Movileanu, 2007, Single-molecule electrophoresis of β -hairpin peptides by electrical recordings and Langevin dynamics simulations, *J. Phys. Chem. B* **111(13)**, 3332-3335.
- D31.** Y.H. Jung, H. Bayley and L. Movileanu, 2006, Temperature-responsive protein pores, *J. Am. Chem. Soc.* **128(47)**, 15332-15340.
- D30.** L. Movileanu, D. Popescu, S. Ion, and A.I. Popescu, 2006, Transbilayer pores induced by thickness fluctuations, *Bull. Math. Biol.* **68(6)**, 1231-1255.
- D29.** D. Dinu, M.T. Nechifor and L. Movileanu, 2005, Ethanol-induced alterations of the antioxidant defense system in rat kidney, *J. Biochem. Mol. Toxicol.* **19(6)**, 386-395.
- D28.** L. Movileanu, J.P. Schmittschmitt, J.M. Scholtz and H. Bayley, 2005, Interactions of peptides with a protein pore, *Biophys. J.* **89(2)**, 1030-1045.
- D27.** L. Movileanu and D. Popescu, 2004, The birth, life and death of statistical pores into a bilayer membrane, *Invited review article*, In: *Recent Research Developments in Biophysics*, vol. 3, Part I, Transworld Research Network, Kerala, pp. 61-86.

- D26. L. Movileanu**, S. Cheley and H. Bayley, 2003, Partitioning of individual flexible polymers into a nanoscopic protein pore, *Biophys. J.* **85(2)**, 897-910.
- D25. D. Popescu**, S. Ion, A. I. Popescu and **L. Movileanu**, 2003, Elastic properties of bilayer lipid membranes and pore formation, *Invited review article*, In: *Membrane Science and Technology Series (vol. 7), Planar Lipid Bilayers (BLMs) and Their Applications*, H. Ti Tien and A. Ottova (Eds.), Elsevier Science Publishers, Amsterdam, pp. 173-204.
- D24. S. Avram**, **L. Movileanu**, D. Mihailescu, M.-L. Flonta, 2002, Comparative study of some energetic and steric parameters of the wild type and mutants HIV-1 protease: a way to explain the viral resistance, *J. Cell Mol. Med.* **6(2)**, 251-260.
- D23. L. Movileanu**, J.M. Benevides and G.J. Thomas, Jr., 2002, Temperature dependence of the Raman spectrum of DNA. II. Raman signatures of premelting and melting transitions of poly(dA)•poly(dT) and comparison with poly(dA-dT)•poly(dA-dT), *Biopolymers* **63(3)**, 181-194.
- D22. L. Movileanu**, J.M. Benevides and G.J. Thomas, Jr., 2002, Determination of Base and Backbone Contributions to the Thermodynamics of Premelting and Melting Transitions in B DNA, *Nucleic Acids Res.* **30(17)**, 3767-3777.
- D21. G. Miles, Jr.**, **L. Movileanu** and H. Bayley, 2002, Subunit composition of a bicomponent toxin: staphylococcal leukocidin forms an octameric transmembrane pore, *Protein Sci.* **11(4)**, 894-902.
- D20. L. Movileanu**, and H. Bayley, 2001, Partitioning of a polymer into a nanoscopic protein pore obeys a simple scaling law. *Proc. Natl. Acad. Sci. USA* **98(18)**, 10137-10141.
- D19. S. Howorka**, **L. Movileanu**, O. Braha and H. Bayley, 2001, Kinetics of duplex formation for individual DNA strands within a single protein nanopore. *Proc. Natl. Acad. Sci. USA* **98(23)**, 12996 - 13001.
- D18. L. Movileanu**, S. Cheley, S. Howorka, O. Braha and H. Bayley, 2001, Location of a constriction in the lumen of a transmembrane pore by targeted covalent attachment of polymer molecules. *J. Gen. Physiol.* **117(3)**, 239-251.
- D17. L. Movileanu**, S. Howorka, O. Braha and H. Bayley, 2000, Detecting protein analytes that modulate transmembrane movement of a polymer chain within a single protein pore. *Nature Biotechnol.* **18(10)**, 1091-1095.
- D16. S. Howorka**, **L. Movileanu**, X. Lu, M. Magnon, S. Cheley, O. Braha and H. Bayley, 2000, A protein pore with a single polymer chain tethered within the lumen. *J. Am. Chem. Soc.* **122(11)**, 2411-2416.
- D15. D. Popescu**, **L. Movileanu**, S. Ion and M.-L. Flonta, 2000, Hydrodynamic effects on the solute transport across endothelial pores and hepatocyte membranes, *Phys. Med. Biol.* **45(11)**, N157-N165
- D14. L. Movileanu**, I. Neagoe and M.L. Flonta, 2000, Interaction of the antioxidant flavonoid quercetin with planar lipid bilayers, *Int. J. Pharm.* **205(1-2)**, 135-146
- D13. L. Movileanu**, J.M. Benevides and G.J. Thomas, Jr., 1999b, Temperature Dependence of the Raman Spectrum of DNA. I. Raman Signatures of Premelting and Melting Transitions of Poly(dA-dT).Poly(dA-dT), *J. Raman Spectrosc.* **30(8)**, 637-649.

- D12.** J.M. Benevides, **L. Movileanu** and G.J. Thomas, Jr., 1999, Structure and thermostability of DNA containing A·T pairs in alternating and non-alternating sequences: investigation of premelting, melting and postmelting phenomena by Raman spectroscopy. *J. Biomol. Struct. Dyn.* **16(6)**, 1331-1332.
- D11.** **L. Movileanu**, 1999, A rapid method for the evaluation of the ionic permeabilities across epithelial cell membranes. *J. Biochem. Biophys. Methods* **38(3)**, 209-215.
- D10.** **L. Movileanu** and D. Popescu, 1998, A theoretical model for the association probabilities of saturated phospholipids from two-component bilayer lipid membranes. *Acta Biotheor.* **46(4)**, 347-368.
- D9.** **L. Movileanu**, 1998, The cell model of the electrolyte transport mechanisms for cultured human colonocytes. Electromotive forces of the cellular pathways. *Bioelectrochem. Bioenerg.* **44(2)**, 169-176.
- D8.** **L. Movileanu**, M.L. Flonta, D. Mihailescu and P.T. Frangopol, 1998, Characteristics of ionic transport processes in fish intestinal epithelial cells. *BioSystems* **45(2)**, 123-140.
- D7.** **L. Movileanu**, D. Popescu and M.L. Flonta, 1998, The hydrophobic acyl-chain effect in the lipid domains appearance through phospholipid bilayers. *J. Mol. Struct. (THEOCHEM)* **434(3)**, 213-227.
- D6.** D. Popescu, **L. Movileanu**, G. Victor and G. Turcu, 1997, Stability and instability properties of aggregation of single-chain amphiphiles into binary mixtures. *Bull. Math. Biol.* **59(1)**, 43-61.
- D5.** **L. Movileanu**, D. Popescu, G. Victor and G. Turcu, 1997, Selective association of phospholipids as a clue for the passive flip-flop diffusion through bilayer lipid membranes, *BioSystems* **40(3)**, 263-275.
- D4.** **L. Movileanu**, 1996, On the electrolyte transport mechanisms through fish intestinal cells. A computer study. *Bioelectrochem. Bioenerg.* **40(2)**, 261-265.
- D3.** **L. Movileanu** and D. Popescu, 1996, Global ratio of efficiency in a single chain binary mixture. *J. Biol. Systems* **4(3)**, 425-432.
- D2.** **L. Movileanu** and D. Popescu, 1995b, Differential length effects into a binary mixture of single-chain amphiphiles in planar monolayers. A three-dimensional approach. *BioSystems* **36(1)**, 43-53.
- D1.** **L. Movileanu** and D. Popescu, 1995a, Aspects of self- and cross-association hydrophobicity in a single-chain binary mixture. A computer study. *Acta Biochim. Polon.* **42(1)**, 89-96.