Curriculumvitae Europass

Informaţiipersonale

Nume/ Prenume	**PopescuGh.Dumitru**
Adresă institut	Calea13Septembrie,nr.13,sector5, Bucuresti
Telefon	0723 628 626
E-mail	dghpopescu@gmail.com;popescu1947@yahoo.com
Naţionalitate	Română
Data naşterii	26.10.1947
Sex	Masculin

Experienţa profesională

Perioada	1.09.2001 – prezent
Funcţia sau postul ocupat	Cercetător ştiinţific gradul I
Activităţi şi responsabilităţi principale	Transport transmembranar; Retele neuronale artificiale; Elasticitatea biomembranelor; Lipozom pulsatoriu.
Numele şi adresa angajatorului	Institutul de Statistică Matematică şi Matematică Aplicată „Gh.Mihoc-C.Iacob” Bucureşti, Departamentul de Modelare Matematică în Ştiinţele Mediului şi Vieţii, Academia Română. Str.13 Septembrie, nr.13,sector5,050711, Bucuresti.
Tipul activităţii sau sectorul De activitate	Cercetare stiintifica Director interimar (1.04.2008-30.06.2008)
Perioada	01.09.2000– 31.08.2001; 1.09.2001-1.09.2012 (1/2 norma)
Funcţia sau postul ocupat	Profeso runiversitar asociat.Cercetăto rştiinţific gradul I.
Activităţi şi responsabilităţi principale	Predare curs „Retele neuronale artificiale” (2003-2007). Cercetare stiintifica.
Numele şi adresa angajatorului	Catedra de Fiziologie Animala şi Biofizică. Facultatea de Biologie, Universitatea din Bucureşti. Spl. Independentei, nr.91–95, sector5, Bucureşti.
Tipul activităţii sau sectorul De activitate	Elasticitatea biomembranelor artificiale si naturale; Bionanotehnologie; Biologie moleculara; Reţele neuronale artificiale. Sinteze biochimice.
Perioada	01.04.1991– 31.08.2000
Funcţia sau postul ocupat	Cercetator ştiinţific gradul II (1.12.1993-31.08.2000) Cercetător ştiinţificgradul III (1.04.1991-30.11.1993);
Activităţi şi responsabilităţi principale	Cercetare stiintifica: Biofizica Membranelor; Biologie Moleculara; Microscopie Electronica. Biomatematica Sef Laborator de Biofizica Membranelor.

	Membru al Consiliului Stiintific
Numele şi adresa angajatorului	Institutul de Biologie, Academia Română.Spl Independentei, 296, sector 6, 060031, Bucuresti
Tipul activităţii sau sectorul De activitate	Simulare moleculară dinamică. Modelarea transportului prin biomembrane.
Perioada	12.07.1980 – 31.03.1991
Funcţia sau postul ocupat	Biofizician principal
Activităţi şi responsabilităţi principale	Biofizica membranelor biologice şi microscopie electronică
Numele şi adresa angajatorului	Institutul de Ştiinţe Biologice, Bucureşti
Tipul activităţii sau sectorul de activitate	Sef Laborator de Microscopie Electronica (1.11.1985-31.03.1991)
Perioada	15.02.1977 – 12.07.1980
Funcţia sau postul ocupat	Cercetător ştiinţific
Activităţi şi responsabilităţi principale	Implementarea tehnologiei CANDU pentru centrala nucleara de la Cernavoda
Numele şi adresa angajatorului	Institutul de Reactori Nucleari Energetici, str. Campului, nr.1, Mioveni, 115400, jud. Arges.
Tipul activităţii sau sectorul de activitate	Fizica reactorilor nucleari
Perioada	01.08.1970 – 15.02.1977
Funcţia sau postul ocupat	Fizician stagiar (1.08.1970-31.07.1973); Cercetător ştiinţific (1.08.1973-15.02.1977)
Activităţi şi responsabilităţi principale	Fizică nucleară. Surse noi de energie.
Numele şi adresa angajatorului	Institutuluide FizicăAtomică, str.Atomistilor, nr. 407, Măgurele, 077125, jud. Ilfov.
Tipul activităţii sau sectorul De activitate	Cercetare experimentala in domeniul reactorilor nucleari

Educaţie şi formare

Perioada	1982-noiembrie 1990
Calificarea/ diploma obţinută	Diploma de doctor în fizică (1990)

Domeni principale studiate/Fizică-studii doctorale	
Numeleşi tipul instituţiei de învăţământ	Facultatea de Fizică,Universitatea din Bucureşti
Perioada	1octombrie1965–30iunie1970 Diplomă
Calificarea/diploma obţinută	de licenţă
Domeniiprincipale studiate	Fizicanucleara
Numeleşi tipul instituţieide învăţământ	Facultateade Fizică,Universitatea din Bucureşti
Perioada	15 septembrie 1961– 30 iunie1965
Calificarea/diploma obţinută	Diplomă de maturitate
Domenii principale studiate	Studii liceale
Numeleşi tipul instituţiei de învăţământ	Liceul „EmanuilGojdu", Oradea
Perioada	15sept. 1954 – iunie 1961
Numeleşi tipul instituţiei de învăţământ	Scoala generala din com. Danciulesti, jud. Gorj
Aptitudini şi Competenţe personale	
Limbi straine cunoscute	Engleza, franceza
Competenta calculator	Limbaje de programare: FORTRAN. C^{++}. Programe pentru calculator: MATLAB, ORIGIN
Proiecte internaţio-nale	1. Proiect ROMLISS Institutul de Biologie, Bucuresti, Univ. Nottingham, Experimental and theoretical studies of ion transport across natural and artificial membranes, 1993–1995, Director partea română; 2. Contr.nr.3452.19.05.2015/IBB:nr.1788/19.05.2015.Grant finantat: Islanda, Liechtenstein, Norvegia. ***Sistem național demonitorizarepetermen lung a bioacumulării metalelor grele aeropurtate (BIOMONRO)***" din Programul RO04 "Reducerea substantelor periculoase".Expert statistica

Proiecte/ contracte naţionale	– **6** contracte de cercetare la IFA-Magurele si IRNE-Pitesti,1975–1980. **Responsabil;** – **6** contracte de cercetare la Institutul de Ştiinţe Biologice Bucureşti,1980–1986. **Responsabil**; – **Program de cercetare**; MEI, Rolul interactiunilor localizate la interfetele de separare a fazelor din biomembrane asupra transportului ionic, 1991–1995, **Director.** – **6** granturi de cercetare [CNCSU-MEI(1), 1995; AcademiaRomana(2), 1996–1998; ANSTI (1), 1999–2000; MEC/CNCSIS(1), 2011-2002] Tema: Interactiuni intermoleculare in biomembrane; Proprietati elastice si formarea porilor lipidici transmembranari; Fluctuatiile grosimii si miscari termice colective in bistraturi lipoidice plane si sferice. **Director.** **– Proiect 50A1-687/2003,** CNCSIS, 2003–2005; **344/10.2004 PNCDI–VIASAN,** 2004–2006 Studiul interactiunii substantelor farmacologice din clasa flavonoide lor si polifenolilor cu membrane artificiale; mecanisme ale depresiei si anxietatii prin metode de simulare moleculara, 2003–2005. **Director.**
Activitate didactica	– Laborator de Biofizică,1982 –1983,Universitatea din Bucureşti, Facultatea de Biologie. -- Conducator ştiinţific pentru lucrari de licenţă: 1991–1997, Facultatea de Biologie, Universitatea din Bucureşti 1993 – 1997, Facultatea de Fizică, Universitatea din Bucureşti – Selecţionare şi îndrumare pentru specializare la Universitatea din Nottingham, Anglia, 1993 – 1995, Facultatea de Fizică, Facultatea de Biologie, Universitatea din Bucureşti. – Cursul de biofizică şi metabolism,1996–1997, Facultatea de Biologie, Universitatea din Bucureşti; – Cursul de reţele neuronale artificiale (program de master, neurobiologie) 2003–2006, Facultatea de Biologie, Universitatea din Bucureşti. – Conducator de doctorat in cadrul Universitatii din Bucuresti,domeniul "StiinteleNaturii" din anul 2004. – Membru in 32 comisii de referenti pentru sustinerea publica a tezei de doctorat.
• **Publicaţii:**	– **2** cărţi: Editutura Universitatii din Bucuresti, 2009; Editura Lambert Academic Publishing, Germania, 2012 – **7** capitole încărţi publicate de edituri straine; – **9** capitole în carti publicate de edituri românesti; – **115** articole publicate în reviste cu referenti; – **26** articole publicate în proceedings; – **141** abstracte în volumele unor conferinţe,congrese internaţionale,conferinte interne;
Premii si distinctii	• Premiul „**Emil Racovita" al Academiei Romane** pentru anul **1990**

Informatii suplimentare	• Fondator al revistei „Romanian Journal of Biophysics” • Membru al unor societati stiintifice: Societatea Romana de Biofizica Pura si Aplicata; Societatea Romana de Fizica; Societatea Romana de Biologie Celulara, • Expert evaluator pentru proiecte de cercetare stiintifica: CNCSIS; ANCS. • Index Hirsch:14 • Citari:635

LISTOFPUBLICATIONS

A. Doctoral thesis

Dumitru Popescu 1990. Cercetari privind formarea, stabilitatea si proprietatile bioagregatelor supramoleculare membranare. Facultatea de Fizica, Universitatea din Bucuresti.

B. Books

1. Dumitru Popescu, Maria Luiza Flonta.Teoria retelelo rneuronale artificiale.Vol.I. Editura Universitatii din Bucuresti, Bucuresti, pp. 264, 2009.

2. Dumitru Popescu.The pulsatory lipid vesicle dynamics under osmotic stress. **Lambert Academic Publishing and AV Academikerverlag, Saarbruecken, Germany, 2012. (ISBN 978-3-659-11086-3)**

C. Articles or chapters in peer-reviewed collective volumes

1. DumitruPopescu, Alin Gabriel Popescu. Pulsatory Liposome: A Possible Biotechnological Device. In : Liposomes - Recent Advances, New Perspectives and Applications, IntechOpen, London, United Kingdom, cap.6, pp 85-98, 2023.

2. DumitruPetruIga, **DumitruPopescu,**Valentin Ion RemusNiculescu *En Block* Approach of Structure Elucidation of Linear Isomeric Aldohexoses as Related to Aldaric (Saccharic) Acids. ***Invited review paper.*** In:Current Approaches in Science and Technology Research, 2021.

3.Dumitru Petru Iga, **Dumitru Popescu,** Valentin Ion Remus Niculescu. Fine Tune Balance of Hydrophobic-Hydrophylic Relationship of Amphiphilic Compounds by Partial Reduction and Methylation. ***Invited review paper.*** In: Current Approaches in Science and Technology Research, 2021.

4. Dumitru Popescu, Liviu Movileanu, Stelian Ion, Aurel Popescu. Elastic properties of bilayer lipid membranes and pore formation. ***Invited review paper*****. In: Membrane Science and Technology “Planar Lipid Bilayers(BLMs) and Their Applications. ”Chapter 5, Vol. 7. Eds.: H. T. Tien and A. Ottova, Elsevier Science, Amsterdam. pp. 173–204, 2003.**

5.Liviu Movileanu, **Dumitru Popescu.** The birth, life and death of statistical pores into a bilayer membrane. ***Invited review paper***. **Recent Research Developments in Biophysics. Chapter 4, Vol. 3,** Part I. Ed. S.G.Pandalai, Transworld Research Network, International Publisher of Review Books in all Areas of Science, Kerala, pp.61-86, 2004.

6. Dumitru Popescu, Liviu Movileanu, Alin Gabriel Popescu. The behaviour of the closed lipidic bilayer under osmotic stress. ***Invited review paper*****.** Mathematical Biology Research Trends. Chapter 11,Ed: Lachlan B.

Wilson, Nova Science Publishers, NY, pp. 275–294, 2008.

7. Ionela Mirela Neagoe, **Dumitru Popescu,** L. Lazar, V.I.R. Niculescu, S. Miclos. Human cryptosporidiosis: species, subgenotypes,differences in pathogenity and clinical manifestations and mathematical methodsfor DNA sequence analysis. ***Invitated chapter***. **Advances in Medicine and Biology. Chapter 7, Vol. 103**, Ed. **Leon V. Berhardt**, **Nova Science Publishers, NY,** pp. 105-166, 2016**.**

8. Rodica Dumitrescu, Marin Andrei, **Dumitru Popescu**. The assessement of radiosensitivity of root interphase cells in PhaseolusVulgaris L..**In: Current Problems and Techniques in Cellular and Molecular Biology**. Eds. C. Craciun and A. Ardelean, Mirton Timisoara, pp 571-574, 1996.

9. Dumitru Popescu. Drumul parcurs in viata, pana la absolvirea liceului. **In: NOI FIZICIENI SI POVESTILE TRECUTULUI (1965-1970),** vol.1. Ed. Ion Craciun, Ars Docendi–Universitatea Bucuresti. pp 222–233, 2011.

10. Dumitru Popescu. Dumnezeu este fizician. **In: NOI FIZICIENI SI POVESTILE TRECUTULUI (1965-1970),** vol.2. Ed. Ion Craciun, Ars Docendi–Universitatea Bucuresti. pp 221–235, 2012.

11. Dumitru Popescu. Dialectica fizicii: De la Esop la Lipozomul Pulsatoriu. **In: NOI FIZICIENI SI POVESTILE TRECUTULUI (1965-1970),** vol.2. Ed. Ion Craciun, Ars Docendi–Universitatea Bucuresti. pp 232–241, 2012.

12. Dumitru Popescu. Un altfel de interviu. Addendum-1. **In: NOI FIZICIENI SI POVESTILE TRECUTULUI (1965-1970),** vol.3. Ed. Ion Craciun, Ars Docendi–Universitatea Bucuresti. pp 238–260, 2015.

13. Dumitru Popescu.Teoria retetelelor neuronale artificiale (recenzie). **In: NOI FIZICIENI SI POVESTILE TRECUTULUI (1965-1970),** vol.3. Ed. Ion Craciun, Ars Docendi–Universitatea Bucuresti. pp 452–458, 2015.

14. Dumitru Popescu. Lipozomul pulsatoriu ca un biomicromotor in 2 timpi (recenzie). **In: NOI FIZICIENI SI POVESTILE TRECUTULUI (1965-1970),** vol.3. Ed. Ion Craciun, Ars Docendi–Universitatea Bucuresti. pp 459–463, 2015.

15. Dumitru Popescu.**100 Gojdisti de prestigiu**, pp.151-153, Aureo, Oradea, 2019.

16. Dumitru Popescu O lectie de viata la chimie, pp.84, **Revista Colegiului National "Emanuil Gojdu"**, Oradea, Seria a IV-a, Nr.49–50, 2019.

D. Articles in peer-reviewed publications

1. D. Popescu, D. Constantin, V. I. Niculescu.Simulation of pusatory liposome working using a linear approximation for transmemebrane pore dynamics, **INCAS Bulletin, 16(1), 89-96, 2024**

2. D.Constantin,L. Preda, A.A. Mocanu, **D. Popescu**, D. Pricopi, V. I. Niculescu. The quantum states for Hydrogen atom: spherical harmonics and the orbitals geometrical representation. **INCAS Bulletin, 16(1), 25-32, 2024**

3. Dumitru Popescu, Ionela Mirela Neagoe, Suzana E. Cilievici, Diana R. Constantin, V. I. R. Niculescu.

Analyse of The Cryptosporidium Spp Gp60 Gene Variability Applying Information Theory. **Romanian Journal of Biophysics, 34(1), 1-12, 2024.**

4. Diana R. Constantin**, Dumitru Popescu.** Analytical Modeling of The Functioning of the Pulsatory Liposome. **Romanian Journal of Physics, 69(1-2), 2024.**

5. Dumitru Popescu, Dumitru Petru Iga, Alin Gabriel Popescu, Valentin I.R. Niculescu. Mathematical Description of the Functioning of the Pulsatory Liposome. **INCAS Bulletin**,Vol.15 (1), 71-80, **2023.**

6. Dumitru Petru Iga, Dumitru Popescu,Valentin I.R. Niculescu, Biochemical Symmetrization/ Desymmetrization of Organic Compounds: Dendrimeric Relations with Molecular Formulas. **Asian Journal of Chemical Sciences,** vol.13(2), 47-66, **2023.**

7. Dumitru Popescu, Dumitru Petru Iga, Alin Gabriel Popescu, Valentin I. R. Niculescu. Pulsatory Liposome – A Two-Stroke Bionic Biomicroengine. **Romanian Journal of Physics, 68, 3-4, 2023.**

8. Dumitru Popescu, Dumitru Petru Iga, Alin Gabriel Popescu, Valentin I. R. Niculescu. **Mathematical Description of the Functioning of the Pulsatory Liposome. Proceedings of the International Conference of Aerospace Sciences "AEROSPATIAL 2022"**, ISSN 2067-8614, ISSN-L = 2067-8614, 2022.

9. Dumitru Petru I. Iga, **Dumitru Popescu**, V. I. R. Niculescu. **Bermuda Triangle In Chemistry.** ***Asian Journal of Chemical sciences 12(2): 14-30,2022.***

10. Dumitru Petru I. Iga, **Dumitru Popescu**, V I. R. Niculescu. **On the Impact of Meso Compounds and Their Isomers. Towards a New Type of Oscillation?** ***Chemistry Research Journal*****, 7(1):39-48, 2022.**

11. Dumitru Petru Iga, **Dumitru Popescu**, Valentin I. R. Niculescu. A New Facet ofSymmetry in Chemistry and Biochemistry. **Int. J. Conf. Proc. 2(5). ICP. 000546. 2021.**

12. Ali Imran, **Dumitru Popescu**, Liviu Movileanu. Cyclic Activity of an Osmotically Stressed Liposome in a Finite Hypotonic Environment. **Langmuir**, **36**, 3659 – 3666, 2020.

13. Andrei-Dennis Voichitoiu, Florentina Duica, Dumitru Petru Iga, **Dumitru Popescu**, Dragos Cretoiu, Nicolae Suciu. Alteration of biochemica lbalance of amphiphilic compounds by partial reduction and methylation. ***Revista de chimie*****,** 2020 (in press) **1.755/2019**

14. Liviu Gr. Ixaru, **Dumitru Popescu**, A mathematical investigation on the active substance pulsatory release from a solution-charged liposome. ***BioSystems***, **179**, 48–54, 2019.

15. Dumitru Petru Iga, **Dumitru Popescu**, Silvia Gatman. Alternate modulation of biological activity of stress molecule, βeta-d-glucopyranosyl-cholesterol, by chemical modification of sugar moiety. Hypotheses concerning biochemical meaning of the new glycosides. ***Revista de chimie***, **70(11),** 3987–3990, 2019.

16. Dumitru Popescu, Alin Gabriel Popescu. The influence of the external bath on the number of cycles of a lipid unilamellar vesicle under hypotonic conditions. ***Romanian J. Biophys*. 28(4),** 159–170, 2018.

17. D. P. Iga, **D. Popescu**, Florentina Duica. Utilizarea exoglicozidazelor pentru analiza a doua substrate enzimaticenoi, β-D-xilopiranozil-4-nitrocatechina-1-ilsiα-lactosil-4-nitrocatechina-1-il. ***Revista de chimie***, **68(8),** 1771–1776, 2017.

18. Valentin Ion Remus Niculescu, **Dumitru Popescu**, Ramona Anton, Liana Sandru. A new family of Woods – Saxon potentials with complex poles. ***Romanian. J. Phys***, **61** (9-10), 1513–1518, 2016.

19. Dumitru Popescu, Sorin Miclos, Iuliana Pasol, Valentin Ion Remus Niculescu. Wavelet and short time Fourier transformations – two complementary methods for spectral analysis of muscle electrical activity. ***Romanian Reports in Physics,* 68 (2),** 486–496, 2016.

20. Ecaterina Maries, Alin Gabriel Popescu, **Dumitru Popescu**. The pulsatory liposomes releasing of the neurotransmitters inside to interneuronal synaptic cleft may be a possible device for the depression treatment. ***Romanian J. Biophys*. 25 (2),** 117–129, 2015.

21. D. Popescu, Iuliana Pasol, S. Miclos. Spectral analysis of electrical activity of the triceps branchii muscle contraction. ***Romanian J. Biophys*.**. **25(1**), 35–45, 2015.

22. Iuliana Paşol, D.-C. Irimia, **D. Popescu**. Correlations between muscle contraction and bone electrical activity. ***Romanian J. Biophys*. 24(3),** 185–197, 2014.

23. Ionela Mirela Neagoe, **D. Popescu**, V.I.R. Niculescu. Applications of entropic divergence measures for DNA segmentation into high variable regions of Cryptosporidium spp.Gp60 gene. ***Romanian Reportsin Physics,* 66(4),** 1078–1087.

24. Ionela Mirela Neagoe, **D. Popescu,** V.I.R. Niculescu. Alternative methods for statistical characterization and quantification of Cryptosporidium spp.gp60 gene variability. ***Romanian Reports in Physics*, 66(3),** 683–692, 2014.

25. Ionela Mirela Neagoe, S. Miclos, **D. Popescu,** D. Savastru, V.I.R. Niculescu, M. Damian, L. Lazar, S. Dontu, M. Tautan. Wavelet spectrogram - based DNA analysis for the assessment of *Cryptosporidium spp*.Gp60 subgenotypes variation**.** ***Optoelectron. Adv. Mater. -Rapid Comm.* 8 (7–8),** 814–819 2014.

26. Ionela Mirela Neagoe, S. Micloş,**D. Popescu**, D. Savastru, D. Steriu, S. Dontu, V.I.R. Niculescu, M. Tautan. DNA structural information from *Giardia intestinalis*t pigene assemblages using the wavelet spectrogram analysis. ***J. Optoelectron. Adv. Mater*. 16 (3–4),** 408–413, 2014.

27. Iuliana Pasol, D-C. Irimia, **D. Popescu**. Electrical activity in bone: comparative research made to activepersons versus sedentary persons.***Discobolul*** **1(37),** 46-51, 2013.

28. D. Popescu, A.G. Popescu**.** Determination of the parameters characterizing a cycle of the pulsatory vesicle. ***Romanian J. Biophys*****. 21(2),** 125–138, 2011.

29. A.G.Popescu, **D.Popescu,** B.Amuzescu, S.Ion. Pulsatory liposome–A possiblebiotechnological device for controlled drugs delivery. III. The liposome relaxing. ***Romanian J. Biophys*****. 20(3),** 223–234, 2010.

30. D. Popescu, A. G. Popescu, B. Amuzescu, E. Maries. Pulsatory liposome – A possible biotechnological device for controlled drugs delivery. II. The pore appearence**.** ***Romanian J. Biophys*****. 20(2),** 171–181, 2010.

31. D. Popescu, A. G. Popescu, B. Amuzescu. Pulsatory liposome – A possible biotechnological device forcontrolled drugs delivery. I. The liposome swelling**.** ***Romanian J. Biophys*****. 20 (1),** 37–46, 2010.

32. Dumitru Popescu, Mathematical modelling of the pulsatory lipid vesicle dynamics under osmotic stress. ***Proceedingsof the Romanian Academy, Series A*****,11**(2), pp.108–115, 2010.

33. Dumitru Popescu, Dumitru Petru Iga. Transmembranare Delivery of Biological ActiveSubstances by Pulsatory Liposomes. ***Rev. Chim.*** **61(1),** 78–81, 2010.

34. Dumitru Popescu, Alin Gabriel Popescu. The working of a pulsatory liposome. ***J. Theor. Biol***., **254**, pp. 515–519, 2008.

35. L. Movileanu, **D.Popescu,** S.Ion, A.Popescu. Transbilayer pores induced by thickness fluctuations. ***Bulletin of Mathematical Biology.*** **68(6),** 1231–1255, 2006.

36. Dumitru Popescu, Corneliu Nicolae Zaharia. Mathematical modelling of the drug delivery by liposomes used as carriers to the target place, ***Studies and Researches in Virology,*** **36(2),** 133–137, 2006.

37. C.N.Zaharia, **D.Popescu.** Docking simulation of hypericine molecule on a supposed active site of serotonine transporter, ***Studies and Researches in Virology,*** **36(1)**, 45–51, 2006.

38. D.Popescu, C.N.Zaharia, I.Stelian, M.L.Flonta.Compensation of the neurotransmitters deficiency in the synaptic cleft. ***Romanian J. Biophys.*** **16(3),** 189–204, 2006.

39. D.Popescu, I.Stelian, A.G.Popescu, Nicoleta Neacşu, Maria Luiza Flonta.The effect of lipid bilayer hydration on transbilayer pores appearance. ***Romanian J. Biophys.*** **16(1),** 39–56, 2006.

40. D.Popescu, C.N.Zaharia, EcaterinaMaries, The rolle of structurale simmetry of some molecules inserted in lipidic bilayer. ***Studies and Researches in Virology*****, 35(2**), 173–178, 2005.

41. Beatrice Macri, **D. Popescu**, Maria-Luiza Flonta, Gheorghe Stoian. The effect of hypericine molecules on lipidic membranes. ***Studies and Researches in Virology*****, 35(1),** 57–63, 2005**.**

42. C.N. Zaharia, **D. Popescu**, M. Stoian. New methods to study some basic mechanisms of neuropsychiatric disorders.***Studies and Researches in Virology*****, 34(1),** 63–69, 2004.

43. B.Amuzescu, S.Ion, **D.Popescu**, LMovileanu, BeatriceMacri, Maria-Luiza Flonta.Thermal group motion creates stochastic pores in plane phosphatidylcholine bilayers. ***Romanian J. Biophys*****. 12(1–2),** 37–52, 2002.

44. D. Popescu, S. Ion, Maria Luiza Flonta, Appearance of pores through black lipid membranes due to collective thermal movement of lipid molecules, ***Annals of Bucharest University*****, 2, anul L**, 185–192, 2001.

45. D.Popescu, S.Ion, L.Movileanu, Florentina Pluteanu, Speranţa Avram, Maria-Luiza Flonta. Elastic Waves Induce The Appearance of pores in a lipid bilayer membrane. ***Romanian J. Biophys*****.11(3–4**), 163–170, 2001.

46. Dumitru Popescu, Carol Prunescu, Paula Prunescu. Substances transport through endothelial pores owing to hydrodynamic effects in sinusoids of rat liver. **R*omanian J. Biophys*****. 11(1–2),** 65–73, 2001.

47. Rodica Dumitrescu, **D. Popescu,** M. Andrei. The gamma radiation effect on cells of two zones of Allium Sativum L. root after radioprotective chemical treatment. ***Romanian J. Biophys*****. 10(1–2),** 68–78, 2000**.**

48. D. Popescu, Maria–Luiza Flonta, S. Ion. Attraction energy through van der Waals–London dispersion forces between coplanar unparallel linear hydrophobic chains. ***Romanian J. Biophys*****. 10(1–2),** 83–88, 2000.

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50. D. Popescu, L. Movileanu, S. Ion, Maria–Luiza Flonta. Hydrodynamic effects on the solutes transport across endothelial pores and hepatocites membranes. ***Physics in Medicine and Biology***, **45(11),** 157–165, 2000.

51. Dumitru Popescu, Victor Gheorghe, Romeo Popa, Mihai Ionescu. The dynamic simulation of a phospholipid molecule in a lipid bilayer. ***Romanian J. Biophys*****. 9(3–4),** 197–210,1999.

52. Rodica Dumitrescu, **D.Popescu,** M.Andrei. The combine deffect of gamma radiation of Co^{60} with different chemical on the cell of the radicular vegetative tip of Allium sativum L. ***Rev. Roum. Biol.*** **44(1–2),** 63–70, 1999.

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