



Livia Petrescu

Work : Splaiul Independentei, no 91-95, 050095, Bucharest, Romania

Email: livia.petrescu@bio.unibuc.ro

Date of birth: 28/07/1970 **Nationality**: Romanian

WORK EXPERIENCE

University of Bucharest, Faculty of Biology

City: Bucharest

[2024 – Current] **ViceDean**

Quality Assurance and Communication with students.

University of Bucharest, Faculty of Biology, Dept of Anatomy, Animal Physiology and Biophysics

City: Bucharest | **Country**: Romania

[2025 – Current] **Associate Professor**

University of Bucharest, Faculty of Biology, Dept of Anatomy, Animal Physiology and Biophysics

City: Bucharest

[2018 – 2025] **Lecturer**

University of Bucharest, Faculty of Biology, Dept of Anatomy, Animal Physiology and Biophysics

City: Bucharest

[2015 – 2018] **Assistant Professor**

University of Bucharest, Faculty of Biology, Research Center "Multi-User Research Base"(BCUM)

City: Bucharest

[2016 – Current] **Researcher**

University of Bucharest, Faculty of Biology, Research Center "Multi-User Research Base"(BCUM)

City: Bucharest

[2007 – 2016] **Research Assistant**

BENJAMIN FRANKLIN THEORETICAL HIGH SCHOOL

City: Bucharest

[2001 – 2005] **Biology teacher secondary school**

EDUCATION AND TRAINING

[08/08/2022 – 12/08/2022] **Course online Geometric Morphometrics for Beginners – 3rd Edition**

Transmitting Science and Universidad Autónoma de Madrid

Country: Spain |

[25/04/2022 – 04/05/2022] **Neurotechnology Summer School**

gTec medical engineering GmbH

[12/04/2021 – 21/04/2021] **Neurotechnology Summer School**

- [24/06/2020 – 31/07/2020] **Course online Introduction to Geometric Morphometrics**
Universitatea catolică din Maul
Country: Chile |
- [20/01/2020 – 24/01/2020] **Course Geometric Morphometrics in R- 7th edition**
Transmitting Science, Institut des Sciences de l'Évolution de Montpellier
City: Barcelona | Country: Spain |
- [05/04/2019 – 06/04/2019] **Electroencephalography workshop**
Liamed Medical equipment
City: Braşov | Country: Romania |
- [05/09/2018 – 07/09/2018] **International School of Biophysics**
Romanian Society of Pure and Applied Biophysics (RSPAB)
City: Bucharest | Field(s) of study: Training in "Imaging for Biomedical Applications"
- [26/03/2015 – 28/03/2015] **Post-graduate course "3rd EASD Postgraduate Course on Clinical Diabetes and its Complications"**
European Association for the Study of Diabetes
City: Sofia | Country: Bulgaria | Field(s) of study: Diabetes
- [20/11/2014 – 22/11/2014] **Magyar Imre Clinical Postgraduate Course**
European Association for the Study of Diabetes (EASD)
City: Budapest | Country: Hungary | Field(s) of study: Diabetes
- [18/05/2011 – 21/05/2011] **Post-graduate course "Current Concepts In The Treatment Of Diabetes And Its Complications"**
European Association for the Study of Diabetes (EASD)
City: Belgrad | Country: Serbia | Field(s) of study: Diabetes
- [2011 – 2013] **Post-graduate studies specializing in Biochemistry and Molecular Biology**
University of Bucharest, Faculty of Biology
City: Bucharest | Field(s) of study: Biochemistry and Molecular Biology
- [2004 – 2013] **PhD title**
University of Bucharest, Faculty of Biology
City: Bucharest | Country: Romania | Field(s) of study: Biology | Thesis: Doctoral thesis entitled: "Higher conversion nanoparticles and the study of their applications in the biomedical field"
- [2001 – 2003] **Master Degree**
University of Bucharest, Faculty of Biology
Field(s) of study: Neurobiology
- [1997 – 2001] **Diploma in Biology**
University of Bucharest, Faculty of Biology
City: Bucharest | Field(s) of study: Biology
- [1993 – 1996] **Post-secondary school graduation certificate**
Ploiesti Post-secondary School of Health
City: Ploiesti | Country: Romania | Field(s) of study: General Medical Assistant

ACADEMIC AND EDITORIAL ACTIVITIES

- [2023 – Current] **Academic Editor**
Responsible for coordinating peer review and editorial decisions for submitted scientific manuscripts for PLOS One Journal ISSN: 1932-6203

[2025 – 10/04/2026] **Guest Editor**

Applied Sciences, section: "Biosignal and Motion Measurements"

https://www.mdpi.com/journal/applsci/special_issues/PLI1897JS1

[2021 – Current] **Reviewer Board**

Electronics (ISSN: 2079-9292), https://www.mdpi.com/journal/electronics/submission_reviewers?page_no=11

[2020 – Current] **Reviewer**

I reviewed 28 papers for the following MDPI journals in the period 2020–2023: Sensors, Electronics, Entropy, Brain Sciences, Biosensors, Applied Sciences, Information, Multimodal Technologies and Interaction, Psych

Other journals reviewed for: Frontiers in Neuroscience (Neuromorphic Engineering), Frontiers in Human Neuroscience (Cognitive Neuroscience), Frontiers in Psychology (Emotion Science), Springer Nature (Discover Computing).

PUBLICATIONS

[2024] [Clarity in complexity: how aggregating explanations resolves the disagreement problem](#)

Write here the description...

Authors: Mitruț, O.; Moise, G.; Moldoveanu, A.; Moldoveanu, F.; Leordeanu, M.; Petrescu, L. | **Journal Name:** Artificial Intelligence Review | **Volume, Issue and Pages:** vol 3, pp 338

[2024] [Overcoming Fear and Improving Public Speaking Skills through Adaptive VR Training](#)

Authors: Jinga, N.; Anghel, A.M.; Moldoveanu, F.; Moldoveanu, A.; Morar, A.; Petrescu, L. | **Journal Name:** Electronics | **Volume, Issue and Pages:** vol 13, p 2042

[2024] [Biophysical Signal Processing for Automatic Anxiety Classification in a Virtual Reality Exposure Therapy System.](#)

Authors: Jinga, N.; Petrescu, C.; Mitruț, O.; Moldoveanu, A.; Moldoveanu, F.; Petrescu, L. | **Journal Name:** UPB Sci. Bull., Series C | **Volume, Issue and Pages:** vol 86

[2023] [Immersive Phobia Therapy through Adaptive Virtual Reality and Biofeedback.](#)

Authors: Moldoveanu, A.; Mitruț, O.; Jinga, N.; Petrescu, C.; Moldoveanu, F.; Asavei, V.; Anghel, A.M.; Petrescu, L. | **Journal Name:** Applied Sciences | **Volume, Issue and Pages:** vol13, p 10365

[2021] [Machine Learning Methods for Fear Classification Based on Physiological Features](#)

Authors: Petrescu, L.; Petrescu, C.; Oprea, A.; Mitruț, O.; Moise, G.; Moldoveanu, A.; Moldoveanu, F. | **Journal Name:** Sensors | **Volume, Issue and Pages:** vol 21, p 4519

[2020] [Integrating Biosignals Measurement in Virtual Reality Environments for Anxiety Detection](#)

Authors: Petrescu, L.; Petrescu, C.; Mitruț, O.; Moise, G.; Moldoveanu, A.; Moldoveanu, F.; Leordeanu, M. | **Journal Name:** Sensors | **Volume, Issue and Pages:** vol 20, p 7088

[2018] [Data acquisition system for electrodermal activity recording](#)

Authors: Petrescu, C. D., Petrescu, L. | **Journal Name:** UPB Sci. Bull., Series C, | **Volume, Issue and Pages:** vol 80, issue 1

[2012] [Interaction of NaYF₄:Er:Yb nanoparticles with phospholipid monolayers as models of biological membranes](#)

Authors: Petrescu, L., Cintează, O., Voiculescu, A.M., Roșu, T., Enculescu, I., Matei, E., Georgescu, Ș., Birjega, R., Avram, S., Mihăilescu, D., | **Journal Name:** Revista de Chimie, București | **Volume, Issue and Pages:** vol 63, issue 9, p. 956-961

[2012] [Infrared-excited bright green and red luminescence in La₃Ga₅Ta_{0.5}O₁₄ doped with erbium and ytterbium](#)

Authors: Georgescu, S., Toma, O., Voiculescu, A.M., Matei, C., Birjega, R., Petrescu, L. | **Journal Name:** Physica B: Condensed Matter | **Volume, Issue and Pages:** vol. 407, p. 1124–1127

- [2025] [From rock to living systems: Lanthanides toxicity and biological interactions.](#)
Authors: Constantin, M.; Chioncel, M.F.; Petrescu, L.; Vrancianu, C.O.; Paun, M.; Cristian, R.-E.; Sidoroff, M.; Dionisie, M.V.; Chifiriuc, M.C. | **Journal Name:** Ecotoxicology and Environmental Safety | **Volume, Issue and Pages:** vol 289, p 117-494
- [2024] [Insights into the effects of lanthanides on mammalian systems and potential applications.](#)
Authors: Constantin, M.; Chifiriuc, M.C.; Vrancianu, C.O.; Petrescu, L.; Cristian, R.E.; Crunteanu, I.; Grigore, G.A.; Chioncel, M.F. | **Journal Name:** Environmental Research | **Volume, Issue and Pages:** vol 263, p 120-235
- [2023] [The Vermiform Appendix and Its Pathologies](#)
Authors: Constantin, M.; Petrescu, L.; Mătanie, C.; Vrancianu, C.O.; Niculescu, A.G.; Andronic, O.; Bolocan, A. | **Journal Name:** Cancers | **Volume, Issue and Pages:** vol 15, p 3872
- [2023] [Landscape of Genetic Mutations in Appendiceal Cancers](#)
Authors: Constantin, M.; Mătanie, C.; Petrescu, L.; Bolocan, A.; Andronic, O.; Bleotu, C.; Mitache, M.M.; Tudorache, S.; Vrancianu, C.O. | **Journal Name:** Cancers | **Volume, Issue and Pages:** vol 15, 3591
- [2023] [Effectiveness of microwave radiation in eliminating different insect species contaminating grain crops](#)
Authors: Saheb Abed, M.; Abdul-Nabe, R.A.; Petrescu, L.; Mihailescu, D.F. | **Journal Name:** Journal of Stored Products Research | **Volume, Issue and Pages:** vol 102, p 102121
- [2020] [Emotion Classification Based on Biophysical Signals and Machine Learning Techniques](#)
Authors: Bălan, O.; Moise, G.; Petrescu, L.; Moldoveanu, A.; Leordeanu, M.; Moldoveanu, F. | **Journal Name:** Symmetry | **Volume, Issue and Pages:** vol 12, p 21
- [2018] [Dynamic analysis of the interactions between Si/SiO₂ quantum dots and biomolecules for improving applications based on nano-bio interfaces.](#)
Authors: Stan, M.S.; Cinteza, L.O.; Petrescu, L.; Mernea, M.A.; Calborean, O.; Mihailescu, D.F.; Sima, C.; Dinischiotu, A. | **Journal Name:** Scientific Reports | **Volume, Issue and Pages:** vol 8, p 5289
- [2011] [Upconversion luminescence of Er, Yb - doped nanolanganite powders synthesized by a citrate sol-gel method](#)
Authors: Voiculescu, A. M., Georgescu, S., Toma, O., Năstase, S., Birjega, R., Petrescu, L., Enculescu, I., Matei, E. | **Journal Name:** Optoelectronics and Advanced materials – Rapid communications | **Volume, Issue and Pages:** Vol. 5, No. 11, p. 1170 – 1173
- [2020] [Protein association investigated by THz spectroscopy and molecular modeling](#)
Authors: Mernea, M., Calborean, O., Petrescu, L., Tita, A., Leca, A., Dascalu, T., and Mihailescu, D. | **Journal Name:** Proceedings Laser Applications in Life Sciences | **Volume, Issue and Pages:** Vol 7376
- [2021] [A Review of Virtual Therapists in Anxiety and Phobias Alleviating Applications.](#)
Authors: Mitruț, O.; Moldoveanu, A.; Petrescu, L.; Petrescu, C.; Moldoveanu, F. | **Journal Name:** Proceedings of Virtual, Augmented and Mixed Reality | **Volume, Issue and Pages:** pp. 71-79
- [2020] [eTher – An Assistive Virtual Agent for Acrophobia Therapy in Virtual Reality](#)
Authors: Bălan, O.; Cristea, Ș.; Moise, G.; Petrescu, L.; Ivașcu, S.; Moldoveanu, A.; Moldoveanu, F.; Leordeanu, | **Journal Name:** Proceedings of HCI International 2020 – Late Breaking Papers: Virtual and Augmented Reality | **Volume, Issue and Pages:** p. 12-25.
- [2020] [Emotion Detection System Oriented on Anthropological Face Landmarks Complying with Isolated and Confined Environmental Conditions.](#)
Authors: Dinculescu, A.C.; Petrescu, L.; Vizitiu, C.; Mandu, A.M. | **Journal Name:** Proceedings of 2020 International Conference on e-Health and Bioengineering (EHB) | **Volume, Issue and Pages:** p 1-4
- [2019] [Sensors system methodology for artefacts identification in Virtual Reality games](#)
Authors: Bălan, O.; Moldoveanu, A.; Petrescu, L.; Moise, G.; Cristea, Ș.; Petrescu, C.; Moldoveanu, A.; Leordeanu, M. | **Journal Name:** Proceedings of International Symposium on Advanced Electrical and Communication Technologies | **Volume, Issue and Pages:** p 1-6

- [2019] [Automatic Identification of Anthropological Face Landmarks for Emotion Detection.](#)
Authors: Dinculescu, A.; Băltoiu, A.; Strungaru, C.; Petrescu, L.; Vizitiu, C.; Mandu, A.; Talpeș, N.; Văleanu, V. | **Journal Name:** Proceedings of 2019 9th International Conference on Recent Advances in Space Technologies (RAST) | **Volume, Issue and Pages:** p 585-590
- [2017] [Classification based on the anatomic-fractal dimension in biology](#)
Authors: Dumitrescu, A.; Popescu, D.; Popescu, C.M.; Petrescu, L. | **Journal Name:** Proceedings of 2017 21st International Conference on System Theory, Control and Computing (ICSTCC) | **Volume, Issue and Pages:** p 465-470
- [2016] [Learning is in the emotions of the beholder - Features of the ideal professor](#)
Authors: Strungaru, C.; Oprina, F.; Petrescu, L.; Avram, S.; Mihailescu, D.F. | **Journal Name:** Proceedings of 10th International Technology, Education and Development Conference, | **Volume, Issue and Pages:** p 4181-4190

PROJECTS

- [2016] **Developing a theater therapy methodology with neurochemical and neurocognitive effects - MET**
 Project POC 147 din 26.10.2016 (SMIS 106688, ID P_37_710), member
- [2013] **Multi-target HIV entry inhibitors delivery by cationic liposomes- An innovative approach to deliver dual-targeting HIV entry inhibitors using cationic liposomes (DELIN)**
 Project HIVERA 4-004/2013, member
- [2013 – 2015] **Carbapenems enzymatic resistance in enterobacteria by phenotypic, genotypic and molecular modeling tools**
 Bilateral cooperation, Romania – China, Project no 617/2013, member
- [2013 – 2015] **Determination of the 3D structure and flexibility of proteins inserted into membranes and bound to ligands by THz spectroscopy and molecular modeling**
 Bilateral cooperation, Romania – Hungary, Project no 675/2013, member
- [2012 – 2014] **Predicting protein structure and dynamics using THz spectroscopy and molecular modelling**
 Bilateral cooperation, Romania - Slovenia, Project no 538/2012, member
- [2020 – 2024] **Immersive Phobia Treatment through Virtual Reality Adaptive and Biofeedback - PhoVR**
 PN-III-P2-2.1-PTE-2019-0859, Director, responsible for UB
- [2020 – 2024] **Summer School "Future in Life and Earth Sciences" BioAspire**
 AG 343 SGU/PV/III/20.10.2020, Director
- [2018 – 2021] **Extensive use of experience in space and security activities**
 PN-III-P1-1.2-PCCDI-2017-0371 /2018, member
- [2014 – 2017] **Integrated system for biomolecular modeling, with applicability to the study of Gram-negative bacteria**
 PNII - PCCA 198/2014, member
- [2012 – 2015] **SAPIENT - Intelligent Tutoring System-Evolutionary Approach in e-Learning**
 PN II - PCCA nr 16/2012, member
- [2011 – 2014] **Protein three-dimensional structure and conformational transitions determination by high-power narrow-band THz radiation and by molecular modeling**
 IDEI 137/2011, member

[2008 – 2011] **THz - "Biomedical Applications of THz Spectroscopy: Early Diagnosis of Cancer"**

PN II nr. 62-055/2008, member

[2008 – 2011] **NANOBIO – "Biospecific nanoparticles for biomedical research and analysis laboratories"**

PN II nr 62-060/2008, member

[2008 – 2011] **BIONANO – "Infrared-pumped nanophosphors with high conversion for applications in biology and medicine".**

PN II nr 12-135/2008, member

[2006 – 2009] **Molecular mechanisms of depression: electrophysiology and molecular modeling studies with clinical implications**

CEEX:141/2006, member

[2020 – 2024] **Secondary Education Project (ROSE) – BELIEVE**

AG 90/SGU/NCI/I, member

LANGUAGE SKILLS

Mother tongue(s): Romanian

Other language(s):

English

LISTENING B2 READING B2 WRITING B2

SPOKEN PRODUCTION B2 SPOKEN INTERACTION B2

French

LISTENING B1 READING B1 WRITING B1

SPOKEN PRODUCTION B1 SPOKEN INTERACTION B1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user