Nume Prenume: **MIKLÓSSY ILDIKÓ**
Gradul didactic: Conferențiar

Instituția unde este titular: Universitatea Sapientia

Facultatea de Științe Economice, Socio-Umane și Inginerești din Miercurea Ciuc
Departamentul Bioinginerie

LISTA DE PUBLICAȚII

A. Teza de doctorat.

"Reproiectarea specificității enzimatice a unor proteaze în vederea obținerii unor proprietăți specifice"

Conducător de doctorat: Prof. dr. ing. Lányi Szabolcs
Universitatea POLITEHNICA din Bucureşti
Facultatea de Chimie Aplicată şi Ştiinţa Materialelor

B. Cărti publicate

B2. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS/CNCS.

1. Bálint Emese-Éva, Csató-Kovács Erika, **Miklóssy Ildikó**: Molekuláris technikák, Gyakorlati jegyzet mérnök hallgatóknak (Tehnici moleculare, Îndrumar de laborator pentru studenți de inginerie), Editura T3, Sfântu Gheorghe, 2022, ISBN 978-606-95430-2-63, 146 pagini.

B4. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web.

1. Szép Sándor, Salamon Rozália Veronika, Máthé István, Miklóssy Ildikó: Îndrumar pentru elaborarea lucrării de diplomă. (2022). https://drive.google.com/drive/folders/1F61fQiQLygC2xYG92_AVGzyNnaJmxF8l?usp=sharing

C. Lucrări ştiinţifice publicate

C1. Lucrări ştiinţifice publicate în reviste cotate ISI

1. Zhou, L., Koltai, E., Mozaffaritabar, S., Ye, M., Higuchi, M., Fodor, K., **Miklóssy, I** & Radák, Z Lactate as a Candidate Mediator of High-Intensity Interval Training (HIIT)-Induced Gut Microbiome Remodeling. Sports Medicine and Health Science, 2026.

2. Czont, A., Bodor, Z., Koncsag, T., & **Miklóssy, I.** Molecular and physiological adaptations to seasonal training in elite U18 ice hockey players. Sports, 2026, 14.2: 57.

3. Péter, I., Balázs, M., Albert, C., Bodor, Z., Orbán, C., & **Miklóssy, I.** Succinic acid production from agro-industrial by-products: A comparative study of Basfia succiniciproducens and Escherichia coli strains. *Electronic Journal of Biotechnology*, 2026, 100727.

4. David, F., Salamon, P., Bodor, Z., **Miklossy, I**., Orban, C., Albert, B., *Relationship between physical condition and academic performance in rural Romanian schoolchildren.* Sportis: Sportis Scientific Journal of School Sport Physical Education and Psychomotricity, 2025, 11(1), 10.

5. Farkas, G., Mahdaouy, Z. E., Babszky, G., Jokai, M., Torma, F., Gu, Y., Pinho, R., **Miklossy, I**., Gordevicius, J., Benczúr, A., *Associations of epigenetic aging and COVID-19: A 3-year longitudinal study*. GeroScience, 2025, 47, 4889–4898. https://doi.org/10.1007/s11357-025-01635-4

6. Zhou, L., Mozaffaritabar, S., Koltai, E., Giannopoulou, S., Kolonics, A., Gu, Y., Pinho, R. A., **Miklossy, I**., Boldogh, I., Radák, Z., *Consecutive skeletal muscle PGC-1α overexpression: A double-edged sword for mitochondrial health in the aging brain.* Biochimica et Biophysica Acta (BBA)-Molecular Basis of Disease, 2025, 1871(6), 167851. https://doi.org/10.1016/j.bbadis.2025.167851.

7. Balázs, M., Péter, I., Bartos, H., Bodor, Z., Antal, E., Albert, C., **Miklóssy, I.**, *Organic Acid Production by Basfia succiniciproducens from Agro-Industrial By-Products.* BioTech, 2025, 14(3), 68. https://doi.org/10.3390/biotech14030068

8. Csató-Kovács, E., Salamon, P., Fikó-László, S., Kovács, K., Koka, A., András-Korodi, M., Antal, E., Brumă, E., Tőrsők, B., Gudor, S., **Miklóssy, I**., Orbán, K. C., Albert, C., Bálint, E. É., Albert, B., *Development of a Mammalian Cell Line for Stable Production of Anti-PD-1*. Antibodies, 2024, 13(4), 82. https://doi.org/10.3390/antib13040082

9. Fodor, H. P., Dávid, H., Czont, A., **Miklóssy, I**., Orbán, K.-C., Tar, G., Fodor, A., et al., *Enhanced Gait Recovery in Chronic Post-COVID-19 Stroke: The Role of Combined Physical Rehabilitation.* Reports, 2023, 6(4), 51. http://dx.doi.org/10.3390/reports6040051

10. Balázs, M., Bartos, H., Lányi, S., Bodor, Z., & **Miklóssy, I**., *Substrate type and CO2 addition significantly influence succinic acid production of Basfia succiniciproducens*. Biotechnology Letters, 2023, 45(9), 1133-1145.

11. Czont, A., Freyer, T., Bodor, Z., Mara, G., Sandor, J., & **Miklóssy, I**., *Position based anthropometric characteristics and general physiological performance of national level, U18 ice hockey players*. Sportis. Scientific Technical Journal of School Sport, Physical Education and Psychomotricity, 2023, 9(1), 81-97. https://doi.org/10.17979/sportis.2023.9.1.9200

12. Salamon P., Orbán Cs. K, Molnár-Nagy K., Kovács Z., Váncsa K., Bálint E., **Miklóssy I.**, Albert B., Tar Gy., Lányi Sz., *Study of native SMAC protein production in the pUbiq expression system: Molecular cloning, biosynthesis and molecular modelling*, Electronic Journal of Biotechnology, 2022, 56, 39-46

13. Nagy, K., Kovacs, Z., **Miklossy, I**., Salamon, P., Orban, C. K., Albert, B., & Lanyi, Sz., 2021, Detergent aided refolding and purification of recombinant XIAP from inclusion bodies. Studia Universitatis Babes-Bolyai, Chemia, 66(4).

14. Boga, R, Keresztesi, A, Bodor, Zs., **Miklóssy, I.,** Nita, I.A., Birsan, V., Micheu, MM *Influence of Rising Air Temperature and Solar Radiation on the Tropospheric Ozone In The Ciuc Basin, Romania*., Romanian Journal of Physics, 2021, 66 (3-4)

15. Bartos, H, Balázs, M., Kuzman, I.H., Lányi, Sz., **Miklóssy, I.**. *Production of High Added-Value Chemicals in Basfia succiniciproducens: Role of Medium Composition*. Sustainability, 2021, 13 (6), 3513.

16. Gáll, Zs., Kelemen, K., Mihály, I., Salamon, P., **Miklóssy, I.,** Zsigmond, B., Kolcsár, M,, *Role of Lacosamide in Preventing Pentylenetetrazole Kindling-Induced Alterations in the Expression of the Gamma-2 Subunit of the GABAA Receptor in Rats*. Current Molecular Pharmacology, 13(1), 2020.

17. Bodor, Zs., Fazakas (Iuhasz), A., Bodor, K., Kovács, E., Miklóssy, I., Albert, B., *Using genome-scale model to predict the metabolic engineering impact on Escherichia coli metabolism during succinic acid production optimization,* Romanian Biotechnological Letters, ISSN: 1224 - 5984, 2019.

18. Bodor, Zs., Lányi, Sz., Albert, B., Bodor, K., Nechifor, A. C., **Miklóssy, I.,** *Model driven analysis of the biosynthesis of 1, 4-butanediol from renewable feedstocks in Escherichia coli*. Revista de Chimie, 70(10), 2019.

19. Szép, R., Bodor, Zs., **Miklóssy, I**., Niță, I.A., Oprea, O.A., Keresztesi, Á.: *Influence of peat fires on the rainwater chemistry in intra-mountain basins with specific atmospheric circulations (Eastern Carpathians, Romania)*. Science of The Total Environment, 647, pp.275-289, 2019.

20. Salamon, P., **Miklóssy, I**., Albert B., Korodi M., Nagy, K., Bakos I., Lányi Sz., Orbán Cs.: *Heterologous Expression and Purification of Recombinant Proapoptotic Human Protein Smac/Diablo with EGFP as Fusion Partner,* Studia Universitatis Babeş-Bolyai Chemia, , 62:2, 333-345, 2017.

21. **Miklóssy, I.,** Bodor, Zs., Sinkler, R., Orbán, K. C., Lányi, S., Albert, B.: *In silico and in vivo stability analysis of a heterologous biosynthetic pathway for 1,4-butanediol production in metabolically engineered E. coli.* Journal of Biomolecular Structure and Dynamics, 35:9, 1874-1889, 2017.

22. Sabó (Pálfi), M., Petres, J., Szilágyi, L., **Miklóssy, I**., Ábrahám, B., Lányi, Sz.. *Possible application of metal sensitive re fluorescent proteins in environmental monitoring*. Environmental Engineering and Management Journal, 11 (1), 193-198, 2012.

23. András, C.D., Csajági, C., Orbán, K.C., Albert, Cs., Ábrahám, B., **Miklóssy, I**.: A possible explanation of the germicide effect of carbon dioxide in supercritical state based on molecular-biological evidences, Medical Hypotheses, 76 (2), p. 325-329., 2010.

24. Ábrahám, B., **Miklóssy, I**., Kovács, E., Tamás, É., Mészáros, I., Szilveszter, Sz., Brezeanu, A., Lányi, Sz., *Genetic Analysis of Pinus sylvestris L. and Pinus sylvestris forma turfosa L. Using RAPD Markers*, Notulae Scientia Biologicae, 2, 1 129-132, 2010

25. Bálint, E., **Miklóssy, I.,** Ábrahám, B., Szilágyi, L., Lányi, Sz., *Heterologous expression of Granzyme H in Escherichia coli*. Studia Universitatis Babes-Bolyai Chemia, ISSN 1224-7154, (Special Issue): p. 5-9, 2010.

26. Bodor, Zs., Orbán, K.Cs., **Miklóssy, I**., Juhász K., Ábrahám, B., Lányi, Sz., *Heterologous expression of Bacillus Licheniformis α-amylase in Pichia pastoris*, Studia Universitatis "Babeş Bolyai", Seria Chemica, 55, Special Issue 9-22, 2010.

27. Both, E., György É., Ábrahám, B., **Miklóssy, I.,** Lányi, Sz., *Selection of lactic acid bacteria isolated from traditionally manufactured cheeses*, Studia Universitatis "Babeş Bolyai", Seria Chemica, Special Issue 23-30, 2010.

28. Gálicza, J., Orbán, K.Cs., Kilár, F., **Miklóssy, I**., B. Ábrahám, Sz. Lányi, *Preparation and modelling of the structure of transferrin-Fe3+-aziridine-carboxylate complex*, Studia Universitatis "Babeş Bolyai", Seria Chemica, Special Issue 45-52, ISSN 1224-7154, 2010.
29. Kovács, E., Szabó, M., **Miklóssy, I.**, Szilágyi, L., Ábrahám, B., Lányi, Sz., *Purification and cleaving of the human GITRL expressed as fusion protein*, Studia Universitatis Babes Bolyai Seria Chemica, 55, Special Issue 81-88., 2010.
30. Szilveszter, Sz., Ráduly, B., **Miklóssy, I.,** Ábrahám, B., Lányi, Sz., Robescu N.D., *Lab scale sequencing batch reactor (sbr) construction and characterization for dynamic modeling with activated sludge model (ASM)*. Studia Universitatis Babes-Bolyai Seria Chemia, Vol. 55 Special Issue, pp 119-133, 2010.
31. Both, E., Kibédi Szabó, Cs. Z., György, É., Tamás, É., **Miklóssy, I**., Ábrahám, B., Lányi, Sz., *Verification of Probiotic Bacterial Properties: Tolerance to Digestive Juices and Adhesion to Epithelial Cells of Lactobacillus acidophilus La-5 and Lactobacillus casei 01*, Studia Universitatis "Babeş Bolyai", Seria Chemica, Special Issue 2 , p. 27, ISSN 1224-7154, 2009.
32. Kovács, E., Pálfi, M., **Miklóssy, I**., Szilágyi, L., Ábrahám, B., Lányi, Sz., *Construction of an Expression Vector for the GITRL Protein*, Studia Universitatis Babes Bolyai Seria Chemica, 54, Special Issue 2 : 83-92, 2009.
33. **Miklóssy, I**., Szilágyi, L., Ábrahám, B., Szilveszter, Sz., Lányi, Sz. *Obtention of the Ancestral Proteinase Stemzyme-IDP-β by Heterologous Expression*, Studia Universitatis "Babeş Bolyai", Seria Chemica, Special Issue 2, p. 11, ISSN 1224-7154, 2009.
34. Pálfi, M., Kovács, E., **Miklóssy, I**., Szilágyi, L., Ábrahám, B., Lányi, Sz., *Engineered Green Fluorescent Protein as a Potential Metal Sensor*, Studia Universitatis "Babeş Bolyai", Seria Chemica, 54, Special Issue 2 35-44., 2009.
35. Szilveszter, Sz., Ráduly, B., **Miklóssy, I**., Ábrahám, B., Lányi, Sz., D. R. Nicolae, *Enzymatic Activity Studies of Biological Wastewater Treatment*, Studia Universitatis "Babeş Bolyai", Seria Chemica, Special Issue 2, p. 113, ISSN 1224-7154, 2009.

C2. Lucrări ştiinţifice publicate în reviste indexate în baze de date internaţionale (indicaţi şi baza de date).

1. Bálint, E., Szilágyi, L., **Miklóssy, I.**, Lányi, Sz., Ábrahám, B., *Design of secretion vector constructs for Granzyme H expression*. UPB Scientific Bulletin Series B: Chemistry and Materials Science, ISSN 1454-2331, 74(1), 2012, Inspec, Scopus, Cambridge Scientific Abstracts.
2. Both, E., György, É., Kibédi Szabó, CS. Z., Tamás, É., Ábrahám, B., **Miklóssy, I**., Lányi, Sz. *Acid and bile tolerance, adhesion to epithelial cells of probiotic microorganisms*, University Politehnica of Bucharest, Scientific Bulletin Series B: Chemistry and Materials Science, 72(2), ISSN 1454-233, 2010. **(**Inspec, Scopus, Cambridge Scientific Abstracts)
3. Pálfi, M., Kovác,s E., Szilágyi, L., **Miklóssy, I**., Ábrahám, B., Lányi, Sz., *Fluorescence quenching analysis of histidine-tagged enhanced green fluorescent protein*, UPB Scientific Bulletin Series B: Chemistry and Materials Science, 72, 2, 45-52, 2010**.** Inspec, Scopus, Cambridge Scientific Abstracts.

4. Szilágyi, L., Ábrahám, B., **Miklóssy, I**., Szilveszter, Sz., Gálicza, J., Lányi, Sz., *Modeling studies on the ancestral proteinase stemzyme IDP-B*, University Politehnica Of Bucharest, Scientific Bulletin Series B: Chemistry And Materials Science**,** 72, 2, 161-168, 2010, Inspec, Scopus, Cambridge Scientific Abstracts.

5. Szilveszter, Sz., **Miklóssy, I**., Mészáros, S., Ábrahám, B., Ráduly, B., Robescu, D. N., Lányi, Sz., *Enzyme activities and distribution in activated sludge in a lab-scale sequencing batch reactor (SBR),* University Politehnica Of Bucharest, Scientific Bulletin Series B: Chemistry And Materials Science*,* 72, 2, 141-150, 2010, Inspec, Scopus, Cambridge Scientific Abstracts.

C5. Lucrări ştiinţifice publicate în reviste, altele decât cele menţionate anterior

1. Kovács E., Szabó M., Szilágyi L., Miklóssy I., Ábrahám B., Lányi Sz., A humán GITRL heterológ expressziója bakteriális rendszerben, Műszaki Szemle, 52 , 21-27.2010

2. Szabó M., Kovács E., Szilágyi L., Miklóssy I., Ábrahám B., Lányi Sz., Zöld fluoreszcens fehérje irányított mutagenézise és a mutáció hatásának vizsgálata, Műszaki Szemle, 52 , 44-50, 2010

3. Pálfi M., Kovács E., Szilágyi L., Miklóssy I., Ábrahám B., Lányi Sz., Egy „világító" fehérje alkalmazási lehetőségei a környezeti biomonitoringban, Csíki Székely Múzeum Évkönyve, 517-522, 2010.

4. Kovács, E., Szabó, M., Szilágyi, L., Miklóssy, I., Ábrahám, B., Lányi, Sz., A humán GITRL heterológ expressziója bakteriális rendszerben, Műszaki Szemle, 52 21-27, 2010.

G. Contracte de cercetare (menţionaţi calitatea de director sau membru)

Granturi/contracte de cercetare relevante:

1. Biosinteza unor compuși chimici cu valoare adăugată prin metode moderne de inginerie metabolică, Nr. contract de finanțare, 12/22/28.04.2015, Institutul Programelor de Cercetare, 2015/2016, Director proiect, perioada 2015-2016, valoare 40500 lei.

2. Apply participatory forest planning for sustainability: Robinwood Plus, InterregIVC, Responsabil proiect, perioada 2010-2013, valoare 602250 Eur.

Granturi/contracte de cercetare:

Programul/proiectul	**Funcţia**	**Perioada**
Optimizarea moleculara a unei enzime centrale din calea metabolica a conversiei xilozei. Reactor optimizat pentru transformarea enzimatica a xilulozei rezultate din deseurile celulozice-OMEXIL, nr. Ctr.1/06.10.2005, program CEEX	Cercetător/ specialist	2005-2007
Cercetări privind creşterea siguranţei alimentare prin utilizarea de procese neconvenţionale de tratare termică a unor produse alimentare lichide- SIGMA, nr. Ctr.: 40/4.2006, program CEEX	Cercetător/ specialist	2006-2008
Impactul câmpurilor electromagnetice de natură antropică asupra ecosistemelor – ICEMECOS, nr. Ctr. X2C37/6/04.10.2006, program CEEX	Cercetător/ specialist	2006-2008

Retea integrata de cercetare pentru constituirea unei platforme tehnologice de biomateriale avansate, compatibila eumat – ADVABIOMAT, nr. Ctr. 54/20.07.2006, program CEEX	Cercetător/ specialist	2006-2008
Sistem informatic de monitorizare si control a statiilor de epurare a apelor uzate prin utilizarea sistemelor distribuite multi-agent si a unor algoritmi avansati de reglare automata- AICSYS, nr. Ctr.: 30/2007, program INOVARE	Cercetător/ specialist	2007-2009
Aplicarea tehnologiilor de preepurare a apelor uzate in reteaua de canalizare-ATARC, nr. Ctr.: 25/2007, program INOVARE	Cercetător/ specialist	2007-2009
Conceperea, realizarea şi experimentarea unui sistem performant de transfer a oxigenului în reactoare biologice aerate-TEOFIT, nr. Ctr.: 21/2007, program INOVARE	Cercetător/ specialist	2007-2009
Cresterea competitivitatii produselor lactate sinbiotice fabricate la sc lactis srl – odorheiu secuiesc prin imbunatatirea calitatii laptelui materie prima si optimizarea si dezvoltarea activitatii de marketing- SIMBIOMARK, nr. Ctr.: 98/2007, program INOVARE	Cercetător/ specialist	2007-2009
Tehnologii inovative de fabricare a produselor lactate functionale in conditii de siguranta alimentara- INOVATEC, nr. Ctr.: 89/2007, program INOVARE	Cercetător/ specialist	2007-2009
Tehnologii inovative de conservare si utilizare a bacteriilor lactice probiotice cu performante biotehnologice superioare pentru cresterea sigurantei alimentare- INCTEC, nr. Ctr.: 61-001, program PNCDI2	Cercetător/ specialist	2007-2010
Cercetari interdisciplinare privind valorificarea energetica a subproduselor din industria laptelui-vespil, nr. Ctr: 31-096, program PNCDI2	Cercetător/ specialist	2007-2010
Interactiibio/non-bio implicate in design-ul tesuturilor tari – INTESTA, nr. Ctr.: 41-059, program PNCDI2	Cercetător/ specialist	2007-2010
Reproiectarea specificitatii enzimatice prin evolutie dirijata:elaborarea unei serin proteaze specifice pentru clivarea c terminala a fosfotirozinei- PHOSPHOTYRASE- nr. Ctr.: 61-027, program PNCDI2	Cercetător/ specialist	2007-2010
Tehnologii pentru producerea de alimente cu continut optim de seleniu- TOPAS, nr. Ctr. 61-022, program PNCDI2	Cercetător/ specialist	2007-2010
Inoculanti microbieni pentru sisteme de agricultura durabila- MIMOSA, nr. Ctr. 31-048, program PNCDI2	Cercetător/ specialist	2007-2010
Programul 4 PNCDI2/ Procedeu de obtinere de bioetanol din deseuri Agroalimentare Tratate cu Enzime Termostabile Recombinante, Obtinute prin Expresie Heterologa Extracelulara – Bio-desenex, nr. Ctr. 62-090/2008	Cercetător/ specialist	2008-2011
Programul 4 PNCDI2/ Elucidarea mecanismului de Reglare Fină a Răspunsului Imun în Patologia Neoplazică şi Inflamatorie Umană în vederea Elaborării unor Terapii Inovative – ERIC, nr. Ctr. 42-147/2008	Cercetător/ specialist	2008-2011
Programul 4 PNCDI2/ Sistem bioinformatic bazat pe inteligenţa artificială pentru monitorizarea sistemului imunitar în corelaţie cu procesele metabolice din organismul uman- MONIMUN, nr. Ctr. 62-073/2008	Cercetător/ specialist	2008-2011
Programul POS CCE/O.211 Biopreparate microbiene pentru creşterea productivităţii şi protecţia culturilor agricole – BIOPREP, nr. Ctr. 169/16.06.2010, ctr. Part. 323/08.06.2010	Cercetător/ specialist	2010-2012

Programul PNII/ PCCA 2/Synthesis of some C4, C5 carboxilic acid building block chemicals from renewable biomass resources-BIOBUILD, nr. Ctr. 31/2012	Cercetător/ specialist	2012-2016
Programul POS CCE/ O.211 Biopreparate microbiene pentru creşterea calitatii furajelor insilozate- SILOPREP, ctr. Nr. 565/09.09.2013, ctr. Part. 416.4/05.08.2013	Cercetător/ specialist	2013-2015
Programul 4 PNCDI2/ Controlul funcţiilor celulelor dendritice cu semnale anti-inflamatoare şi de moarte celulară-DCFANS, ctr. Nr. 119/2014	Cercetător/ director interimar	2014-2016
Programul 4 PNCDI2/ Ingineria metabolică la Escherichia coli pentru obţinerea 1,4-butandiolului din glucoză şi glicerină şi conversia catalitică a acestuia la compuşi cu valoare adăugată-METABCHEM, ctr. Nr. 44/2014	Cercetător/ specialist	2014-2016
Programul 4 PNCDI2/ Managementul complex al resturilor vegetale în sistemele de agricultură conservativă CERES, ctr. Nr. 159/2014	Cercetător/ specialist	2014-2016
Elaborarea planului de management integrat al siturilor Natura 2000 Muntii Ciucului ROSCI0323 şi Depresiunea si Muntii Ciucului ROSPA0034, Contract de finanțare 177/31.05.2018, POIM 2014-2020	Asistent manager	2017-2022
SPARKS, Rethinking innovation together. Grant Agreement number: 665825, Horizon2020,	Cercetător/ specialist	2017-2019
Inspires “Ingenious Science shops to promote Participatory Innovation, Research and Equity in Science	Cercetător/ specialist	2019 -2020

III. RECUNOAȘTEREA

J. Citări
240 citări
H-index 7
https://scholar.google.com/citations?user=HgXptNcAAAAJ&hl=en

RG profile: https://www.researchgate.net/profile/Ildiko-Miklossy

Reviewer: Romanian Biotechnology Letters, Journal of Agricultural and Food Chemistry, Journal of Biomolecular Structure and Dynamics, Microbial Cell Factories

Data,
02.10.2026

Semnătura,