Instituția de învățământ superior: Universitatea Babeș-Bolyai

Facultatea: de Biologie și Geologie

Domeniul de licență: Științe inginerești aplicate

Programul de studii de licență: Biotehnologii industriale

Perioada evaluării: 2020-2025

TABEL PRIVIND INDEPLINIREA INDICATORULUI
Activitatea științifică în domeniul disciplinelor

„Cadrele didactice titulare* au pregătirea iniţială, sunt doctori / doctoranzi şi cercetează în domeniul în care se includ disciplinele din postul ocupat.”

Nr. crt.	Gradul didactic, numele şi prenumele titularului vârsta / vechimea în învăţământul superior	Disciplinele din cadrul programului de studii incluse în postul didactic şi tipul activităţii desfăşurate (curs, seminar, lucrări, proiect)	**Competenţa cadrului didactic titular în disciplinele din postul didactic**			Constatări privind îndeplinirea indicatorului conform Anexei 4.1
			Universitatea/ facultatea/ specializarea absolvită	Specializarea la masterat/ doctorat	Numărul de cărţi, numărul de lucrări ştiinţifice, numărul de brevete în domeniul disciplinelor din postul didactic (conform Anexelor 4.1.)	
0	***1***	***2***	***3***	***4***	***5***	***6***
1.	Prof. dr. Banciu Horia-Leonard 50 / 27	Biofizică (curs)	Universitatea Babeș-Bolyai / Facultatea de Biologie şi Geologie / Biologie	Masterat în Biologie Celulară și Moleculară, Doctorat în Biologie	2 capitole de carte (B1, B2); 41 lucrări indexate ISI/BDI (C1-C41); 3 lucrări indexate ISI/BDI (D1-D3); 1 cerere de brevet de invenție (E1).	Îndeplinit
2.	Prof. dr. Banciu Manuela 51 / 23	Biochimia metabolismului (curs, lucrări practice)	Universitatea Babeș-Bolyai / Facultatea de Biologie şi Geologie / Biologie	Masterat în Biologie Celulară și Moleculară, Doctorat în Farrmacie	40 lucrări indexate ISI/BDI (C1-40)	Îndeplinit
		Matematica cu aplicații in biologie (curs, seminar)			2 lucrări indexate ISI/BDI (E42)	
3.	Prof. dr. Butiuc Anca-Livia 56 / 22	Biotehnologii generale I (curs, lucrări practice)	Universitatea Babeș-Bolyai / Facultatea de Biologie şi	Masterat în Biologie Celulară și Moleculară	Teza (A1); 1 cărți (B1); 4 capitole cărți (B2-5); 41 lucrări indexate ISI/BDI (C1-C41)	Îndeplinit
		Biotehnologii de reciclare a produselor reziduale				

		(curs, lucrări practice, seminar) Biopolimeri (curs, seminar)	Geologie / Biologie	Doctorat în Biologie		
4	Prof. dr. ing. Cimpoiu Claudia 58 / 35	Tehnici cromatografice (curs, seminar)	Universitatea Babeș-Bolyai din Cluj-Napoca / Facultatea de Chimie și Inginerie Chimică	Doctorat in Chimie	44 lucrări indexate ISI (C1-C44)	Îndeplinit
5	Prof. dr.ing. Cormos Călin 54 / 21	Proiectarea instalațiilor biotehnologice, (curs, lucrări practice)	Universitatea Babeș-Bolyai din Cluj-Napoca / Facultatea de Chimie și Inginerie Chimică	Doctorat în Inginerie Chimică	Teza (A); 1 capitole în cărți (B1); 114 articole ISI/BDI (C1-C114); 1 brevet de invenție (E1)	Îndeplinit
6	Prof. dr. Negrusa Adina Letiția 52 / 28	Managementul calității (curs, seminar)	Universitatea Babeș-Bolyai / Facultatea de Stiinte Economice	Doctorat in Management	5 carti/capitole (B1-5), 6 lucrări indexate ISI/BDI (C1-6)	Îndeplinit
7	Prof. dr. Sălăgean Grigore-Ștefan 76 / 43	Algebra liniara (curs, seminar)	Universitatea Babes-Bolyai / Facultatea de Matematică-Mecanică / Mașini de calcul	Doctorat in Matematici	Teza (A), 1 carte (B1), 1 capitol (B2); 7 lucrări indexate ISI (C2 – C6, C9, C10) / 3 BDI (C1, C7, C8)	Îndeplinit
8	Prof. Dr. Ing Toșa Monica Ioana 58 / 35	Biocombustibili	Universitatea Babeș-Bolyai / Facultatea de Chimie și Inginerie Chimică	Doctorat în Chimie	1 capitol de care la editură internațională 15 lucrări indexate ISI (C) 20 lucrări în volume ale conferințelor (D)	Îndeplinit

9	Prof. dr. Turdean Graziella-Liana 60 / 30	Termodinamică (curs, lucrări practice) Biosenzori (curs, lucrări practice)	Universitatea Babeș-Bolyai / Facultatea de Chimie si Inginerie Chimica / Tehnologia substanțelor anorganice	Doctorat in Chimie	Teza de doctorat (A); 55 articole ISI (C1-C55)	Îndeplinit
10	Conf. dr. Barbu Lucian 53 / 25	Citologie vegetală și animală (curs, lucrări practice)	Universitatea Babeș-Bolyai / Facultatea de Biologie şi Geologie / Biologie	Doctorat în Biologie	100 lucrări indexate ISI (C1-C100)	Îndeplinit
11	Conf. dr. Chelaru Julieta Daniela 57 / 17	Grafica asistata de calculator (curs, lucrări practice)	Universitatea Tehnica din Cluj-Napoca / Facultatea de Știința și Ingineria Materialelor	Masterat (Procedee speciale în protecția mediului)/ Doctorat în Ingineria Materialelor	1 carte (B); 23 lucrări indexate ISI/BDI (C); 6 lucrări in rev. si vol. conf. (D);	Îndeplinit
12	Conf. dr. Dobrotă Cristina (63 / 40)	Design experimental (curs, seminar)	Universitatea Babeș-Bolyai / Facultatea de Biologie şi Geologie / Biologie	Doctorat în Biologie	Teza (A), 5 cărţi (B1-B5), 2 capitole de carte (B6, B7); 18 lucrări indexate ISI/BDI (C1-C18); 1 brevet de invenţie (E1)	Îndeplinit
13	Conf. dr. Ing. Fogarasi Szabolcs 39 / 15	Procese de transfer (curs, seminar, lucrări)	Universitatea Babeș-Bolyai / Facultatea de Chimie şi Inginerie Chimică / Inginerie Chimică	Doctorat în Inginerie Chimică	1 capitole de carte (B1); 17 lucrări indexate ISI (C1-C17);	Îndeplinit
14	Conf. dr. *habil.* Ing. Gaina Ioana Luiza 55 / 27	Chimie verde (curs)	Universitatea Babeș-Bolyai / Facultatea de Chimie şi	Masterat în chimie organică / Doctorat în	44 lucrări indexate ISI/BDI (C1-C41);	Îndeplinit

			Inginerie Chimică / Inginerie Chimică	Inginerie Chimică		
15	Conf. dr. *habil.* László Zoltán 46 / 17	Statistică matematică (curs, seminar)	Universitatea Babeș-Bolyai / Facultatea de Biologie și Geologie / Biologie	Masterat în Biologie Celulară și Moleculară, Doctorat în Științele mediului	teza (A), carte (B), 21 lucrări indexate ISI/BDI (C1-21)	Îndeplinit
16	Conf. dr. Lupan Iulia 48 / 16	Genetică moleculară (curs) Inginerie genetică (curs, lucrări practice)	Universitatea Babeș-Bolyai / Facultatea de Biologie și Geologie / Biologie	Doctorat în Biologie	teza (A); 65 lucrări indexate ISI/BDI (C1-C65);	Îndeplinit
17	Conf. Dr. Petrescu Letiția 45 / 11	Cad și sofware specific ingineriei chimice (curs, proiect)	Universitatea Babeș-Bolyai/ Facultatea de Chimie și Inginerie Chimică	Doctorat în inginerie chimică	Teza (A); 35 lucrări indexate ISI/BDI (C1- C35); 20 lucrări în rev. și vol. conf. (D1-D20)	Îndeplinit
18	Conf. dr. Podar Dorina 49 / 25	Biochimia și biologia moleculara a plantelor (curs, lucrări practice)	Universitatea Babeș-Bolyai / Facultatea de Biologie și Geologie / Biologie	Master în Biologie celulară și moleculară / Doctorat în Biologie	teza (A); 1 capitol (1), 8 cărți (1-9), 27 lucrări indexate ISI/BDI (C1-C27)	Îndeplinit
19	Conf. dr. Ing. Timiș Elisabeta Cristina 44 / 11	Automatizări (curs, lucrări practice)	Universitatea Babeș-Bolyai / Facultatea de Chimie și Inginerie Chimică	Doctorat în Inginerie Chimică	21 lucrări indexate ISI/BDI (C1-13, E1-2)	Îndeplinit
20	Conf. dr. Trîmbițaș Radu	Analiză matematică (curs, seminar)				Îndeplinit
21	Conf. dr. Varga Richard Attila 52 / 24	Chimie generală (curs)	Universitatea Babeș-Bolyai din Cluj-Napoca / Facultatea de	Master în Chimie Coordinativă și	teza (A); 1 carte (B1); 17 lucrări indexate ISI/BDI (C1- C17); 7 lucrări în volume de conferințe (D1-D7)	Îndeplinit

			Chimie şi Inginerie Chimică / Chimie	Organometalică / Doctorat în Chimie		
22	Șef lucr. dr. Carpa Rahela 45 / 21	Microbiologie generală (curs, lucrări practice) Biotehnologii în industria cosmetică (curs, lucrări practice) Microbiologie industrială (curs, lucrări practice) Tehnici si metode de prelucrare a produselor naturale (curs, lucrări practice)	Universitatea Babeș-Bolyai / Facultatea de Biologie şi Geologie / Biologie	Doctorat în Biologie	teza doctorat (A) 3 cărţi (B1) 4 capitole cărți (B2-3) 62 lucrări indexate ISI (C1-2) 20 lucrări indexate BDI (C3-4) 15 lucrări în reviste neindexate (D1)	Îndeplinit
23	Lect. dr. Casoni Dorina 47 / 20	Controlul calității produselor biotehnologice (curs, lucrări practice) Controlul analitic al bioproceselor (curs)	Universitatea Babeș-Bolyai Cluj-Napoca / Facultatea de Chimie și Inginerie Chimică / Chimie	Master Chimie Analitică/ Doctorat în Chimie	Teza (A) 1 carte (B1) 31 lucrări indexate ISI/BDI (C1, C31); 12 lucrări în rev. şi vol. conf. (D:1-12)	Îndeplinit
24	Șef lucr. dr. Ciorică Alexandra 32 / 7	Culturi de celule (curs, lucrări practice)	Universitatea Babes-Bolyai Cluj-Napoca / Facultatea de Biologie si Geologie/Biologie Medicală	Doctorat în Biologie	1 Teză doctorat (A) 50 lucrări indexate ISI/BDI publicate în ultimii 10 ani (C) 1 Brevet de invenție (E1)	Îndeplinit
25	Șef lucr. dr. Cîmpean Mirela 47 / 20	Acvacultura (curs, lucrări practice) Ecotoxicologie (curs, lucrări practice)	Universitatea Babeș-Bolyai / Facultatea de Biologie şi Geologie / Biologie	Doctorat în Biologie		Îndeplinit
26	Lect. dr. ing. Cobzac Codruța 61 / 33	Controlul calității produselor biotehnologice (curs, lucrări practice)				Îndeplinit
27	Lect. Dr. Covaci Eniko 35 / 8	Chimie analitică (curs, lucrări practice)	Universitatea Babeș-Bolyai Cluj-Napoca /	Master Chimie Clinică /	2 cărţi (B1, B3); 2 lucrări indexate ISI/BDI (C1, C12); 4 brevete de invenţie (E1-E3, E5)	Îndeplinit

			Facultatea de Chimie și Inginerie Chimică / Chimie	Doctorat în Chimie	teza (A); 7 cărţi (B2, B4, - B9; 21 lucrări indexate ISI/BDI (C2-C11, C13-C23); 12 lucrări în rev. şi vol. conf. (D1-12); 4 brevete (E4, E6-E8)	
28	Șef lucr. dr. Crișan Florin 61 / 34	Biologie generală I (curs, lucrări practice)	Universitatea Babeș-Bolyai / Facultatea de Biologie și Geologie / Biologie	Masterat - Licencié spécial en Environ-nement / Doctorat în biologie		Îndeplinit
		Biologie generală II (curs, lucrări practice)			Teza de doctorat (A); Articole de specialitate: 9 (ISI/BDI – C 1, 2, 3, 4, 5, 6) (neindexate (D1, 2, 3).	Îndeplinit
29	Șef lucr. dr. Cruceriu Daniel 33 / 9	Biotehnologii vegetale (curs, lucrări practice)	Universitatea Babeș-Bolyai / Facultatea de Biologie și Geologie / Biologie	Doctorat în Biologie	Teza de doctorat (A); Articole de specialitate: 10 (ISI – C 1-10, BDI – C11), conferințe: 3 (D1-3)	Îndeplinit
30	Șef lucr. dr. Dobre Camelia 53 / 23	Biotehnologii animale (curs, lucrări practice)	Universitatea Babeș-Bolyai / Facultatea de Biologie și Geologie / Biologie	Doctorat în Biologie	Teza (A); 4 capitole în cărți (B1-B4); 10 articole ISI/BDI (C1-C10); 1 lucrare conferințe (D1)	Îndeplinit
31	Șef lucr. dr. Drăghici Ioana 34 / 11	Genetică generală și populațională (curs, lucrări practice)	Universitatea Babeș-Bolyai / Facultatea de Biologie și Geologie / Biologie	Doctorat în Biologie	14 lucrări indexate ISI/BDI (ISI C1-11; BDI C12-14)	Îndeplinit
32	Șef lucr. dr. Farkas Ancuța 47 / 13	Biotehnologii generale II (curs, lucrări practice)	Universitatea Babeș-Bolyai / Facultatea de Biologie și Geologie / Biologie	Masterat în Biocenologie și gestionarea ariilor protejate / Doctorat în Biologie	7 cărţi și capitole de cărţi (B1-B7); 27 lucrări indexate ISI/BDI (C1-C27), teza (A)	Îndeplinit
		Biotehnologii în protecția mediului (curs, lucrări practice)			7 cărţi și capitole de cărţi (B1-B7); 21 lucrări indexate ISI/BDI (C1; C6-C15;C17-C22; C24-C27), teza (A)	
		Biotehnologii farmaceutice I/II (curs, lucrări practice)			7 cărţi și capitole de cărţi (B1-B7); 17 lucrări indexate ISI/BDI (C1-C7; C9-C11; C16; C18; C21; C23-C26)	

		Fundamente de antreprenoriat (curs, lucrări practice)			7 cărți și capitole de cărți (B1-B7); 27 lucrări indexate ISI/BDI (C1-C27), teza (A)	
33	Șef lucr. dr. Mircea Cristina 34 / 10	Evolutionism (curs, lucrări practice)	Universitatea Babeș-Bolyai / Facultatea de Biologie și Geologie / Biologie	Doctorat în Biologie	21 lucrări indexate ISI/BDI (C1-13, E1-2)	Îndeplinit
34	Lect. dr. Ing. Moisă Mădălina Elena 36 / 5	Biotehnologia alimentelor (curs, seminar)	Universitatea Babeș-Bolyai / Facultatea de Chimie și Inginerie Chimică	Doctorat în Chimie	12 lucrări indexate ISI/BDI	Îndeplinit
35	Lect. dr. Moldovan Bianca 48 / 25	Securitatea alimentelor (curs, lucrări practice)	Universitatea Babeș-Bolyai / Facultatea de Chimie si Inginerie Chimica	Doctorat în Chimie	teza (A); 1 capitol carte (B1);	Îndeplinit
36	Șef lucr. dr. Rauca Valentin 42 / 8	Biochimie structurală (curs, lucrări practice)	Universitatea Babeș-Bolyai / Facultatea de Biologie și Geologie / Biologie	Doctorat în Biologie	15 lucrări indexate ISI/BDI (C1-C15) Autor principal – 5, Co-autor - 10	Îndeplinit
37	Lect. univ. dr. Șeulean Andreea-Angela 37 / 10	Managementul proiectului (curs, seminar)	Academia de Studii Economice din București / Facultatea de Marketing / Marketing	Managementul marketingului / Marketing	Teza de doctorat (A) 1 carte (B1) 2 capitole în cărți (B2, B3) 5 lucrări indexate ISI/BDI (C1−C5) 4 lucrări în volume de conferințe (D1−D4)1	Îndeplinit
38	Șef lucr. dr. Toma Vlad Alexandru 34 / 12	Enzimologie specială (curs, lucrări practice) Biotehnologia enzimelor și proteinelor (curs, lucrări practice)	Universitatea Babeș-Bolyai / Facultatea de Biologie și Geologie / Biologie	Doctorat în Biologie	Teza de doctorat (A1), 1 carte (B1); 57 lucrări indexate ISI/BDI (C1-C57);	Îndeplinit

39	Lector dr. Vlad Miranda 63 / 25	Limbaje de programare (curs, seminar) Informatică aplicată (curs, seminar)	Universitatea Babeș-Bolyai Cluj-Napoca/ / Facultatea de Matematică și Informatică / Informatică	Doctorat în cibernetică și statistică economică	teza (A1); 6 capitole cărţi coautor(B1-B6); 20 lucrări indexate ISI/BDI (C1-C20), 18 lucrări neindexate (D1-D18)	Îndeplinit
40	Dr. Crăciun Ana-Maria 39 / 12	Metode spectrometrice de analiză (curs, seminar)	Universitatea Babes-Bolyai, Cluj-Napoca	Doctorat în fizică	1 capitol carte (B) 53 lucrări indexate ISI (C1) 1 lucrare indexată BDI (C2) 1 brevet național obținut (E)	Îndeplinit
41	Ing. Mocanu Antonia-Maria	Bune practici de producție și de laborator (curs, seminar)	Universitatea Babeș-Bolyai / Facultatea de Biologie și Geologie / Biologie	Specialist	Specialist Biotehnologii industriale	Îndeplinit
42	Ing. Dr. Panait Diana 31 / 7	Operare pe calculator (seminar)	Universitatea Babeș-Bolyai / Facultatea de Biologie și Geologie / Biologie	Biotehnologie moleculară / Doctorat în Biologie	4 lucrări indexate ISI/BDI (C1, C4)	Îndeplinit
43	Dr. Ing. Souad-Diana Tork 33 / 5	Bioreactoare 1 (curs, seminar) Bioreactoare 2 (laborator)	Universitatea Babeș-Bolyai/ Facultatea de Chimie și Inginerie Chimică/ Chimie Alimentară și Tehnologii Biochimice	Masterat în Ingineria Proceselor Organice și Biochimice/ Doctorat în Chimiei	1 capitol de carte (B1); 7 lucrări indexate ISI/BDI (C1-C7)	Îndeplinit

* Din statul de funcții cumulativ al tuturor disciplinelor și tuturor activităților didactice desfășurate în cadrul programului de studii evaluat.

Rector,

Prof. univ. dr. Adrian-Olimpiu PETRUSEL

Persoana de contact,

Conf. dr. Dorina PODAR

A N E X A 4 . 1

Nume Prenume: **Banciu Horia Leonard**
Gradul didactic: Profesor universitar
Instituția unde este titular: Universitatea „Babeș-Bolyai”
Facultatea: Biologie și Geologie
Departamentul: Biologie Moleculară și Biotehnologie

L I S T A
lucrărilor ştiinţifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

Doctor in Biologie al Universității Tehnice Delft, Olanda – 01.11.2004.
Titlul tezei: “Physiology of alkaliphilic sulfur-oxidizing bacteria from soda lakes”.
(https://repository.tudelft.nl/islandora/object/uuid%3Aaf937601-7857-4326-ae2c-fb6b02ba0b69)
Conducător științific: Prof. Dr. Gijs J. Kuenen.
Titlul a fost recunoscut de Ministerul Educației, Cercetării și Tineretului din România prin Atestatul Nr. 8472 din 27.04.2005.

B. Cărţi si capitole în cărţi publicate în ultimii 10 ani

1. Andrei, A.-Ș. Bulzu. P.-A., **Banciu, H.L.** (2020) Blossoms of rot: microbial diversity of saline sapropels. In: Extremophiles as Astrobiological Models. J. Seckbach and H. Stan-Lotter (eds), Series Astrobiology Perspectives on Life of the Universe (Series editors R. Gordon and J. Seckbach), Wiley-Scivener, Beverly, MA, USA, ISBN 978-1119591689, pp.45-82. https://doi.org/10.1002/9781119593096.ch3

2. Tripon, A.M., Buda, D.M, **Banciu, H.L.**, Cristea, A. (2025). Polyhydroxyalkanoate Synthesis in Halotolerant and Halophilic Members of Halomonadaceae Family. pp 191-220. In: Khare, S., Karan, R., Sinha, R., Hemamalini, R. [eds.]. New Horizons in Halophilic Microbes and Their Enzymes. CRC Press, Boca Raton, FL, USA (in press). ISBN: 978-1-032-67528-2 (Hardcover version), ISBN: 978-1-003-46646-8 (Electronic version), DOI: 10.1201/9781003466468.

C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani

1. Baricz, A., Cristea, A., Muntean, V., Teodosiu, G., Andrei, A.-Ș., Molnar, I., Alexe, M., Rakosy-Tican, E., Banciu, H.L. (2015) Culturable diversity of aerobic halophilic archaea (Fam. Halobacteriaceae) from hypersaline, meromictic Transylvanian lakes. Extremophiles, 19 (2): 525-537. https://doi.org/10.1007/s00792-015-0738-1
2. Bartha, L., Sramkó, G., Volkova, P. A., Surina, B., Ivanov, A. L., Banciu, H. L. (2015) Patterns of plastid DNA differentiation in Erythronium (Liliaceae) are consistent with allopatric lineage divergence in Europe across longitude and latitude. Plant Syst Evol, 301 (6): 1747-1758.

3. Coman, C., Chiriac, C.M., Robeson, M.S., Ionescu, C., Dragos, N., Barbu-Tudoran, L., Andrei, A.-S., Banciu, H.L., Sicora, C., Podar, M. (2015) Structure, mineralogy and microbial diversity of geothermal spring microbialites associated with a deep oil drilling in Romania. Front Microbiol, 6: 253.
4. Andrei, A.-Ş., Robeson, M.S., Baricz, A., Coman, C., Muntean, V., Ionescu, A., Etiope, G., Alexe, M., Sicora, C.I., Podar, M., Banciu, H.L. (2015). Contrasting taxonomic stratification of microbial communities in two hypersaline meromictic lakes. ISME J., 9 (12): 2642-2656. https://doi.org/10.1038/ismej.2015.60
5. Banciu, H.L., Muntyan, M.S. (2015). Adaptive strategies in the double-extremophilic prokaryotes inhabiting soda lakes. Curr Opin Microbiol, 25: 73-79. https://doi.org/10.1016/j.mib.2015.05.003
6. Sorokin, D.Y., Banciu, H.L., Muyzer, G. (2015). Functional microbiology of soda lakes. Curr Opin Microbiol, 25: 88-96. https://doi.org/10.1016/j.mib.2015.05.004
7. Bartha, L., Stepanov, N. V., Rukšāns, J., Banciu, H.L., Keresztes, L. (2015). Non-monophyly of Siberian Erythronium (Liliaceae) leads to the recognition of the formerly neglected Erythronium sajanense. J Plant Res, 128 (5): 721-729.
8. Ionescu, M., Rădulescu, A.Z., Oniga, S., Banciu, H.L., Lupan, I. (2015). Inhibition of Streptococcus pneumoniae and Escherichia coli adenylate kinase by 2-amino-4-methyl-n'-arylidenethiazole-5-carbohydrazides. Farmacia, 63 (3): 338-342.
9. Voica, D.M., Bartha, L., Banciu, H.L., Oren, A. (2016). Heavy metal resistance in halophilic Bacteria and Archaea. FEMS Microbiol. Lett. 363(14): fnw146. https://doi.org/10.1093/femsle/fnw146.
10. Andrei, A.Ş., Baricz, A, Păusan, M., Muntean, V., Sicora, C., Alexe, M., Rakosy-Tican, E., Banciu, H.L. (2017) Spatial distribution and molecular diversity of archaeal communities in the extreme hypersaline meromictic Brâncoveanu Lake (Transylvanian Basin, Romania). Geomicrobiol. J., 34 (2):130-138. https://doi.org/10.1080/01490451.2016.1149527
11. Andrei, A.-Ş., Păuşan, M. R., Tămaş, T., Har, N., Barbu-Tudoran, L., Leopold, N., Banciu, H.L. (2017). Diversity and biomineralization potential of the epilithic bacterial communities inhabiting the oldest public stone monument of Cluj-Napoca (Transylvania, Romania). Front Microbiol., 8:372. https://doi.org/10.3389/fmicb.2017.00372.
12. Molnár, I., Besenyei, E., Thieme, R., Thieme, T., Aurori, A., Baricz, A., Banciu, H.L., Rakosy-Tican, E. (2017). Mismatch repair deficiency increases the transfer of antibiosis and antixenosis properties against Colorado potato beetle in somatic hybrids of Solanum tuberosum + S. chacoense. Pest Manag Sci, 73 (7):1428-1437.
13. Dina, N.E., Leș, A., Baricz, A., Szoke-Nagy, T., Leopold, N., Sârbu, C., Banciu, H.L. (2017) Discrimination of haloarchaeal genera using Raman spectroscopy and robust methods for multivariate data analysis. J Raman Spectrosc., 48 (8): 1122–1126.
14. Andrei, A.Ş., Baricz, A., Robeson, M.S., Păuşan, M.R., Tămaş, T., Chiriac, C., Szekeres, E., Barbu-Tudoran, L., Levei, E.A., Coman, C., Podar, M., Banciu, H.L. (2017) Hypersaline sapropels act as hotspots for microbial dark matter. Sci. Rep. 7(1):6150. https://doi.org/10.1038/s41598-017-06232-w.

15. Alexe, M., Șerban, G., Baricz, A., Andrei, A.-Ș., Cristea, A., Battes, K., Cîmpean, M., Momeu, L., Muntean, V., Porav, S.A., Banciu, H.L. (2018). Limnology and plankton diversity of salt lakes from Transylvanian Basin (Romania): A review. J. Limnol., 77(1): 17-34. https://doi.org/10.4081/jlimnol.2017.1657.
16. Bercea, S., Năstase-Bucur, R., Mirea, I. C., Măntoiu, D. Ş., Kenesz, M., Petculescu, A., Baricz, A., Andrei, A.-Ș., Banciu, H.L., Papp, B., Constantin, S. Moldovan, O. (2018). Novel approach to microbiological air monitoring in show caves. Aerobiologia, 34(4): 445–468.
17. Lee, C.J., McMullan, P.E., O'Kane, C.J., Stevenson, A., Santos, I.C., Roy, C., Ghosh, W., Mancinelli, R.L., Mormile, M.R., McMullan, G., Banciu, H.L., Fares, M.A., Benison, K.C., Oren, A., Dyall-Smith, M.L., Hallsworth, J.E. (2018). NaCl-saturated brines are thermodynamically moderate, rather than extreme, microbial habitats. FEMS Microbiol. Rev., 42(5): 672–693, https://doi.org/10.1093/femsre/fuy026 .
18. Cristea, A., Baricz, A., Leopold, N., Floare, C., Borodi, G., Kacso, I., Tripon, S., Bulzu, P.-A., Andrei, A. Ș., Cadar, O., Levei, E. A., Banciu, H.L. (2018) Polyhydroxybutyrate production by an extremely halotolerant Halomonas elongata strain isolated from the hypersaline meromictic Fără Fund Lake (Transylvanian Basin, Romania). J. Appl. Microbiol., 125 (5), 1343—1357. https://doi.org/10.1111/jam.14029.
19. Bulzu, P.-A., Andrei, A.-Ș., Salcher, M.M., Mehrshad, M., Inoue, K., Kandori, H., Béjà, O., Ghai, R., Banciu, H.L. (2019) Casting light on Asgardarchaeota metabolism in a sunlit microoxic niche. Nat. Microbiol. 4: 1129–1137. https://doi.org/10.1038/s41564-019-0404-y.
20. Buda, D.M., Bulzu, P.-A., Barbu-Tudoran, L., Porfire, A., Pătraș, L., Sesărman, A., Tripon, S., Șenilă, M., Ionescu, M.I., Banciu, H.L. (2019) Physiological response to silver toxicity in the extremely halophilic archaeon Halomicrobium mukohataei. FEMS Microbiol. Lett. 366(18): fnz231. https://doi.org/10.1093/femsle/fnz231.
21. Moldovan, O.T., Øvrevik Skoglund, R., Banciu, H.L., Dinu Cucoș, A., Levei, E.A., Perșoiu, A., Lauritzen, S.-E. (2019) Monitoring and risk assessment for groundwater sources in rural communities of Romania (GROUNDWATERISK). Research Ideas and Outcomes 5: e48898. https://doi.org/10.3897/rio.5.e48898
22. Banciu, H.L., Enache, M., Montalvo-Rodriguez, R., Oren, A., Ventosa, A. (2019) Ecology and physiology of halophilic microorganisms - Thematic issue based on papers presented at Halophiles 2019 – 12th International Conference on Halophilic Microorganisms, Cluj-Napoca, Romania, 24-28 June, 2019. FEMS Microbiol Lett. 366(23), fnz250. https://doi.org/10.1093/femsle/fnz250
23. Inoue, K., Tsunoda, S.P., Singh, M., Tomida, S., Hososhima, S., Konno, M., Nakamura, R., Watanabe, H., Uchihashi, T., Bulzu, P.-A., Banciu, H.L., Andrei, A.-Ș., Ghai, R., Béjà, O., Kandori, H. (2020) Schizorhodopsins: A novel family of rhodopsins from Asgard archaea that function as light-driven inward H+ pumps. Sci. Adv. 6(15): #eaaz2441. DOI: https://doi.org/10.1126/sciadv.aaz2441.
24. Salcher, M.M., Andrei, A.-Ș., Bulzu, P.-A., Keresztes Z.G., Banciu, H.L., Ghai, R., (2020) Visualization of Lokiarchaeia and Heimdallarchaeia (Asgardarchaeota) by fluorescence in situ hybridization and catalyzed reporter deposition (CARD-FISH). mSphere 5(4):e00686-20. https://doi.org/10.1128/mSphere.00686-20 .

25. Moldovan, O. T., Baricz, A., Szekeres, E., Kenesz, M., Hoaghia, M. A., Levei, E.A.. Mirea, I.C., Năstase-Bucur, R., Brad, T., Chiciudean, I., Banciu, H.L. (2020). Testing different membrane filters for 16S rRNA gene-based metabarcoding in karstic springs. Water 12(12): 3400. https://www.mdpi.com/2073-4441/12/12/3400.
26. Baricz, A., Chiriac,C.M., Andrei, A.-Ș., Bulzu, P.-A., Levei, E.A., Cadar, O., Battes, K.P. Cîmpean, M., Șenilă, M., Cristea, A., Muntean, V., Alexe, M., Coman, C., Szekeres, E.K., Sicora, C.I., Ionescu, A., Blain, D., O'Neill, W.K., Edwards, J., Hallsworth, J.E., Banciu, H.L. (2021) Spatio-temporal insights into microbiology of the freshwater-to-hypersaline, oxic-hypoxic-euxinic waters of Ursu Lake. Environ. Microbiol. 23 (7): 3523-3540. https://doi.org/10.1111/1462-2920.14909 .
27. Șuteu, A.M., Momeu, L., Battes, K.P., Baricz, A., Cristea, A., Bulzu, P.-A., Buda, D.M., Banciu, H.L., Cîmpean, M. (2021) Diversity and distribution of phototrophic primary producers in saline lakes from Transylvania, Romania. Plant Syst Evol 307 (12). https://doi.org/10.1007/s00606-020-01733-0
28. Gînguță, A., Rusu, I., Mircea, C., Ioniță, A., Banciu, H.L., Kelemen, B. (2021). Mitochondrial DNA profiles of individuals from a 12th century necropolis in Feldioara (Transylvania). Genes 12(3): 436. https://doi.org/10.3390/genes12030436.
29. Baricz, A., Levei, E. A., Șenilă, M., Pînzaru, S. C., Aluaş, M., Vulpoi, A., Filip, C., Tripon, C., Dădârlat, D., Buda, D.M., Dulf, F.V., Pintea, A., Cristea, A., Muntean, V., Keresztes, Z.G., Alexe, M., Banciu, H.L. (2021). Comprehensive mineralogical and physicochemical characterization of recent sapropels from Romanian saline lakes for potential use in pelotherapy. Sci Rep 11, 18633. https://doi.org/10.1038/s41598-021-97904-1
30. Cristea, A., Pustan, M., Bîrleanu, C., Dudescu, C., Floare, C. G., Tripon, A. M., Banciu, H.L. (2022). Mechanical evaluation of solvent casted poly (3-hydroxybutyrate) films derived from the storage polyesters produced by Halomonas elongata DSM 2581T. J Polym Environ, 30 (1), 424-430. https://doi.org/10.1007/s10924-021-02204-4
31. Bartha, L., Mandáková, T., Kovařík, A., Bulzu, P.-A., Rodde, N., Mahelka, V., Lysak, M.A., Fustier, M.-A., Šafář, J., Cápal, P., Keresztes, L., Banciu, H.L. (2022) Intact rDNA arrays of Potentilla-origin detected in Erythronium nucleus suggest recent eudicot-to-monocot horizontal transfer. New Phytol. 235 (3), 1246-12591, https://doi.org/10.1111/nph.18171
32. Banciu, H.L., Gridan, I.M., Zety, A.V., Baricz, A. (2022) Asgard archaea in saline enviornments. Extremophiles. 26:21 https://doi.org/10.1007/s00792-022-01266-z.
33. Chiciudean, I., Russo, G., Bogdan, D.F., Levei, E.A., Faur, L., Hillebrand-Voiculescu, A., Moldovan, O.T., Banciu, H.L. (2022). Competition-cooperation in the chemoautotrophic ecosystem of Movile Cave-first metagenomic approach on sediments. Environ Microbiome 17 (1):44. https://environmentalmicrobiome.biomedcentral.com/articles/10.1186/s40793-022-00438-w.
34. Bogdan, D.F., Baricz, A., Chiciudean, I., Bulzu, P.-A., Cristea, A., Năstase-Bucur, R., Levei, E.A., Cadar, O., Sitar, C., Banciu, H.L., Moldovan, O.T. (2023) Diversity, distribution and organic substrates preferences of microbial communities of a low anthropic activity cave in North-Western Romania. Front Microbiol 14:962452. https://doi.org/10.3389/fmicb.2023.962452

35. Gál, E. Banciu, H.L., Ionescu, M.I., Năstasă, C.M. (2023) Antibacterial synergistic and antagonistic effects of commercial essential oils from Thymus vulgaris L. and Syzygium aromaticum L. in combination with Nigella sativa L. Farmacia, 71(1): 97-108. https://farmaciajournal.com/issue-articles/antibacterial-synergistic-and-antagonistic-effects-of-commercial-essential-oils-from-thymus-vulgaris-l-and-syzygium-aromaticum-l-in-combination-with-nigella-sativa-l/ . https://doi.org/10.31925/farmacia.2023.1.13
36. Viver, T., Conrad, R. E., Lucio, M., Harir, M., Urdiain, M., Gago, J.F., Suárez-Suárez, A., Bustos-Caparros, E., Sanchez-Martinez, R., Mayol, E., Fassetta, F., Pang, J., Gridan, I.M., Venter, S., Santos, F., Baxter, B., Llames, M.E., Cristea, A., Banciu, H.L., Hedlund, B.P., Stott, M.B., Kämpfer P., Amann, R., Schmitt-Kopplin, P., Konstantinidis, K.T., Rossello-Móra, R. (2023) Description of two cultivated and two uncultivated new Salinibacter species, one named following the rules of the bacteriological code: Salinibacter grassmerensis sp. nov.; and three named following the rules of the SeqCode: Salinibacter pepae sp. nov., Salinibacter abyssi sp. nov., and Salinibacter pampae sp. nov..Syst Appl Microbiol, 46: 126416. https://doi.org/10.1016/j.syapm.2023.126416
37. Szekeres, E., Baricz, A., Cristea, A., Levei, E.A., Stupar, Z., Brad, T., Kenesz, M., Moldovan, O.T., Banciu, H.L. (2023) Karst spring microbiome: Diversity, core taxa, and community response to pathogens and antibiotic resistance gene contamination, Sci Total Environ, 895: 165133, https://doi.org/10.1016/j.scitotenv.2023.165133
38. Buda, D.M., Szekeres, E.K., Barbu, L, Esclápez, J., Banciu, H.L. Genome-wide transcriptional response to silver stress in extremely halophilic archaeon Haloferax alexandrinus DSM 27206T. BMC Microbiol. 23: 381. https://doi.org/10.1186/s12866-023-03133-z
39. Timmis, K., Hallsworth, J.E., McGenity, T.J., Armstrong, R., Colom, M.F., Karahan, Z.C., ..., Banciu, H.L., ... & Serna, J. G. (2024). A concept for international societally relevant microbiology education and microbiology knowledge promulgation in society. Microb Biotechnol, 17(5), e14456. https://doi.org/10.1111/1751-7915.14456
40. Boukheloua, R., Mukherjee, I., Park, H., Šimek, K., Kasalický, V., Ngochera, M., Grossart, H.-P., Picazo-Mozo, A., Camacho, A., Cabello-Yeves, P. J., Rodriguez-Valera, F., Callieri, C., Andrei, A.-S., Pernthaler, J., Posch, T., Alfreider, A., Sommaruga, R., Hahn, M. W., Sonntag, B., Lopez-Garcia, P., Moreira, D., Jardillier, L., Lepère, C., Biderre-Petit, C., Bednarska, A., Ślusarczyk, M., Tóth, V. R., Banciu, H. L., Kormas, K., Orlic, S., Šantić, D., Muyzer, G., Herlemann, D. P. R., Tammert, H., Bertilsson, S., Langenheder, S., Zechmeister, T., Salmaso, N., Storelli, N., Capelli, C., Lepori, F., Lanta, V., Henriques Vieira, H., Kostanjšek, F., Kabeláčová, K., Chiriac, M.-C., Haber, M., Shabarova, T., Fernandes, C., Rychtecký, P., Znachor, P., Szőke-Nagy, T., Layoun, P., Wong, H. L., Silva Kavagutti, V., Bulzu, P.-A., Salcher, M. M., Piwosz, K., Ghai, R. (2024) Global freshwater distribution of Telonemia protists. ISME J, wrae177, https://doi.org/10.1093/ismejo/wrae177
41. Mircea, C., Drăghici, I., Levei, E.A., Cristea, A., Gridan, I.M., Zety, A.V., Banciu, H.L. (2024). The fungal side of the story: Saprotrophic- vs. symbiotrophic-predicted ecological roles of fungal communities in two meromictic hypersaline lakes from Romania. Microb Ecol 87, 130. https://doi.org/10.1007/s00248-024-02446-4

D. Lucrări publicate în ultimii 10 anii în reviste şi volume de conferinţe cu referenţi

1. Banciu H. L. (2018) The Saline Organic-Rich Sediments: A Short Overview, Aerul si Apa: Componente ale Mediului/ Air and Water: Components of the Environment, ISSN 2067-743X, pp 129-135.
2. Bulzu P.-A., Cristea, A., Buda, D.M., Banciu, H.L. (2019) Asgardarchaeota – A Novel Prokaryotic Group discovered in Aquatic Sediments that might shed Light on the Origin and Early Evolution of Eukaryotes. Aerul si Apa: Componente ale Mediului/ Air and Water: Components of the Environment, ISSN 2067-743X, pp 435-446. doi: 10.24193/AWC2019_43.
3. Buda, D.M., Bulzu P.-A., Cristea, A., Banciu, H.L. (2019) The Saline Aquatic Systems as 'Natural Reservoirs' for Microorganisms with Current and Potential Applications. Aerul si Apa: Componente ale Mediului/ Air and Water: Components of the Environment, ISSN 2067-743X, pp. 427-434. doi: 10.24193/AWC2019_42.

E. Brevete obţinute în întreaga activitate

1. Titlul inventiei „Metodă expediționară de testare in-situ a contaminării cu E. coli și coliformi totali din ape destinate consumului uman". Numar de inregistrare a brevetului la OSIM: A100050 din data de 07.02.2023. Inventatori desemnati: Stupar Zamfira, Levei Erika, Moldovan Oana Teodora, Skøglund Rannveig Øvrevik si Banciu Horia Leonard. Rezumat publicat ăbn Buletinul Oficial de Proprietate Industrială nr. 8/ 2024, p. 22.

Data: 01.07.2025 **Semnătura:**

A N E X A 4 . 1

Nume Prenume: **BANCIU Manuela**
Gradul didactic: Profesor universitar

Instituția unde este titular: Universitatea Babeş-Bolyai

Facultatea: Biologie şi Geologie
Departamentul: Biologie Moleculară și Biotehnologie

L I S T A
lucrărilor ştiinţifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

Doctor in **Farmacie** al **Universității Utrecht (**Facultatea de Ştiinţe, Departamentul de Farmaceutică**), Olanda**; Data susţinerii doctoratului -3 decembrie 2007 (atestat de echivalare nr. 26487/13.03.2008).
Titlul "Liposomal Targeting of Glucocorticoids to Inhibit Tumor Angiogenesis"
(https://dspace.library.uu.nl/bitstream/handle/1874/24452/index.htm%3Bjsessionid=41CB336F51EBD687617B2EBF4764A9E2?sequence=16)
Conducători științifici: Prof. Dr. Gert Storm; dr. Raymond Schiffelers.

B. Cărţi si capitole în cărţi publicate în ultimii 10 ani

-

C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani

În calitate de autor principal

1. Alupei MC, Licarete E, Cristian FB, **Banciu M.** (2014). Cytotoxicity of lipophilic statins depends on their combined actions on HIF-1α expression and redox status in B16.F10 murine melanoma cells. *Anticancer Drug*s. 25(4): 393-405. https://doi.org/10.1097/CAD.0000000000000065 **FI 2014= 1.784**.
2. Pap PL, Sesarman A, Vágási CI, Buehler DM, Pătraş L, Versteegh MA, **Banciu M**. (2014). No evidence for parasitism-linked changes in immune function or oxidative physiology over the annual cycle of an avian species. Physiol Biochem Zool. 87(5): 729-39 https://doi.org/10.1086/681243 **FI 2014= 2.398**.
3. Alupei MC, Licarete E, Patras L, **Banciu M** (2015). Liposomal simvastatin inhibits tumor growth via targeting tumor-associated macrophages-mediated oxidative stress. Cancer Lett.356 (2):946-952. https://doi.org/10.1016/j.canlet.2014.11.010 **FI 2015= 5.992**.
4. Porfire A., Tomuta I., Muntean D., Luca L., Licarete E., Alupei M.C., Achim M., Vlase L., **Banciu M.** (2015). Optimizing long-circulating liposomes for delivery of simvastatin to C26 colon carcinoma cells. *J Liposome Res.* 25(4):261-9. https://doi.org/10.3109/08982104.2014.987787 **FI 2015= 1.797**.

5. Licarete E, Sesarman A, **Banciu M**. (2015) Exploitation of pleiotropic actions of statins by using tumour-targeted delivery systems. *J Microencapsul.* 32(7):619-31. https://doi.org/10.3109/02652048.2015.1073383 **FI 2015= 1.631**.

6. Patras L, Sesarman A, Licarete E, Luca L, Alupei MC, Rakosy-Tican E, **Banciu M**. (2016) Dual role of macrophages in the response of C26 colon carcinoma cells to 5-fluorouracil administration. *Oncol Lett*. 12(2):1183-1191. https://doi.org/10.3892/ol.2016.4708 **FI 2016= 1.390**.

7. Licarete E, Sesarman A, Rauca VF, Luput L, Patras L, **Banciu M**.(2017). HIF-1α acts as a molecular target for simvastatin cytotoxicity in B16.F10 melanoma cells cultured under chemically induced hypoxia. Oncol Lett. 13(5): 3942-3950. https://doi.org/10.3892/ol.2017.5928 **FI 2017= 1.664**.

8. Achim M, Tomuta I, Muntean D, Porfire A, Tefas LR, Patras L, Licarete E, Alupei MC, Vlase L, **Banciu M.** (2017) Optimization and in vitro evaluation of 5-fluorouracil - loaded long - circulating liposomes, FARMACIA 65 (1): 82-91. https://farmaciajournal.com/issue-articles/optimization-and-in-vitro-evaluation-of-5-fluorouracil-loaded-long-circulating-liposomes/ **FI 2017= 1.507**.

9. Patras L, Sylvester B, Luput L, Sesarman A, Licarete E, Porfire A, Muntean D, Drotar DM, Rusu AD, Nagy AL, Catoi C, Tomuta I, Vlase L, **Banciu M**, Achim M (2017) Liposomal prednisolone phosphate potentiates the antitumor activity of liposomal 5-fluorouracil in C26 murine colon carcinoma in vivo Cancer Biol Ther 18(8): 616-626 (autor corespondent). https://doi.org/10.1080/15384047.2017.1345392 **FI 2017= 3.373**.

10. Luput L, Licarete E, Sesarman A, Patras L, Alupei MC, **Banciu M**. (2017). Tumor-associated macrophages favor C26 murine colon carcinoma cell proliferation in an oxidative stress-dependent manner. *Oncol Rep* 37(4): 2472-2480. https://doi.org/10.3892/or.2017.5466 **FI 2019= 3. 417**.

11. Sesarman A, Tefas L, Sylvester B, Licarete E, Rauca V, Luput L, Patras L, **Banciu M,** Porfire A (2018) Anti-angiogenic and anti-inflammatory effects of long-circulating liposomes co-encapsulating curcumin and doxorubicin on C26 murine colon cancer cells *Pharmacol Rep* 70(2): 331-339 (autor corespondent) https://doi.org/10.1016/j.pharep.2017.10.004 **FI 2018= 2.761**.

12. Luput L, Licarete E, Drotar DM, Nagy AL, Sesarman A, Patras L, Rauca VF, Porfire A, Muntean D, Achim M, Tomuta I, Vlase L, Catoi C, Dragos N, **Banciu M** (2018) In Vivo Double Targeting of C26 Colon Carcinoma Cells and Microenvironmental Protumor Processes Using Liposomal Simvastatin *J Cancer* 9 (2): 440-449. https://doi.org/10.7150/jca.21560 **FI 2018=3.182**.

13. Rauca VF, Licarete E, Luput L, Sesarman A, Patras L, Bulzu P, Rakosy-Tican E, **Banciu M** (2018) **Combination therapy of simvastatin and 5, 6-dimethylxanthenone-4-acetic acid synergistically suppresses the aggressiveness of B16.F10 melanoma cells,** *PLoS ONE* 13(8):e0202827**.** https://doi.org/10.1371/journal.pone.0202827 **FI 2018=2.776**.

14. Sesarman A, Tefas L, Sylvester B, Licarete E, Rauca V, Luput L, Patras L, Porav S, **Banciu M**, Porfire A. (2019) Co-delivery of curcumin and doxorubicin in PEGylated liposomes favored the antineoplastic C26 murine colon carcinoma microenvironment. *Drug Deliv Transl Res*. 9 (1): 260-272 (autor corespondent) https://doi.org/10.1007/s13346-018-00598-8 **FI 2019 = 2.664**.

15. Patras L, **Banciu M** (2019) Intercellular Crosstalk Via Extracellular Vesicles in Tumor Milieu as Emerging Therapies for Cancer Progression. *Curr Pharm Des.* 25(17):1980-2006 https://doi.org/10.2174/1381612825666190701143845 **FI 2019 = 2.208**.

16. Licarete E, Rauca VF, Luput L, Patras L, Sesarman A, **Banciu M**. (2019) The prednisolone phosphate-induced suppression of the angiogenic function of tumor-associated macrophages enhances the antitumor effects of doxorubicin on B16.F10 murine melanoma cells in vitro. *Oncol Rep*. 42(6):2694-2705 https://doi.org/10.3892/or.2019.7346 **FI 2019= 3. 417**.

17. Luput L, Sesarman A, Porfire A, Achim M, Muntean D, Casian T, Patras L, Rauca VF, Drotar DM, Stejerean I, Tomuta I, Vlase L, Dragos N, Toma VA, Licarete E, **Banciu M**. (2020) Liposomal simvastatin sensitizes C26 murine colon carcinoma to the antitumor effects of liposomal 5-fluorouracil in vivo. Cancer Sci. doi: https://doi.org/10.1111/cas.14312 **FI 2020=6.716**.

18. Patras L, Fens MHAM, Vader P, Barendrecht A, Sesarman A, **Banciu M,** Schiffelers R.(2020) Normoxic Tumour Extracellular Vesicles Modulate the Response of Hypoxic Cancer and Stromal Cells to Doxorubicin In Vitro *Int J Mol Sci*.;21(17):5951. (autor corespondent) https://doi.org/10.3390/ijms21175951 **FI 2020=5.924**.

19. Licarete E, Rauca VF, Luput L, Drotar D, Stejerean I, Patras L, Dume B, Toma VA, Porfire A, Gherman C, Sesarman A, **Banciu M.** (2020) Overcoming Intrinsic Doxorubicin Resistance in Melanoma by Anti-Angiogenic and Anti-Metastatic Effects of Liposomal Prednisolone Phosphate on Tumor Microenvironment. *Int J Mol Sci.* 21(8):2968. https://doi.org/10.3390/ijms21082968 **FI 2020=5.924**.

20. Rauca VF, Patras L, Luput L, Licarete E, Toma VA, Porfire A, Mot AC, Rakosy-Tican E, Sesarman A, **Banciu M**. (2021) Remodeling tumor microenvironment by liposomal codelivery of DMXAA and simvastatin inhibits malignant melanoma progression. *Sci Rep.* 11(1):22102. https://doi.org/10.1038/s41598-021-01284-5 **FI 2021=4.997**.

21. Patras L, Ionescu AE, Munteanu C, Hajdu R, Kosa A, Porfire A, Licarete E, Rauca VF, Sesarman A, Luput L, Bulzu P, Chiroi P, Tranca RA, Meszaros MS, Negrea G, Barbu-Tudoran L, Potara M, Szedlacsek S, **Banciu M.** (2022) Trojan horse treatment based on PEG-coated extracellular vesicles to deliver doxorubicin to melanoma *in vitro* and *in vivo*. Cancer Biol Ther. 23(1):1-16. https://doi.org/10.1080/15384047.2021.2003656 **FI 2022=3.6**.

22. Ranamalla SR, Porfire AS, Tomuță I, **Banciu M**. (2022) An Overview of the Supramolecular Systems for Gene and Drug Delivery in Tissue Regeneration. Pharmaceutics. Aug 18;14(8):1733. https://doi.org/10.3390/pharmaceutics14081733 **FI 2022=5.4**.

23. Negrea G, Rauca VF, Meszaros MS, Patras L, Luput L, Licarete E, Toma VA, Porfire A, Muntean D, Sesarman A, **Banciu M**. (2022) Active Tumor-Targeting Nano-formulations Containing Simvastatin and Doxorubicin Inhibit Melanoma Growth and Angiogenesis. Front Pharmacol. 13:870347. https://doi.org/10.3389/fphar.2022.870347 **FI 2022=5.6**.

24. Sesarman A, Luput L, Rauca VF, Patras L, Licarete E, Meszaros MS, Dume BR, Negrea G, Toma VA, Muntean D, Porfire A, Banciu M. (2024)Targeting of M2 macrophages with IL-13-functionalized liposomal prednisolone inhibits melanoma angiogenesis in vivo. J Liposome Res. 2024 20:1-12 https://doi.org/10.1080/08982104.2024.2315452 **FI 2023=3.6**

25. Dume B, Licarete E, Banciu M (2024) Advancing Cancer Treatments: The role of oligonucleotides-based therapies in driving progress, Molecular Therapy: Nucleic Acid (2024), 35(3) : 102256 https://doi.org/10.1016/j.omtn.2024.102256 **FI 2023=6.5.**

În calitate de coautor

26. Baldea I, Olteanu DE, Bolfa P, Ion RM, Decea N, Cenariu M, **Banciu M**, Sesarman AV, Filip AG.(2015) Efficiency of photodynamic therapy on WM35 melanoma with synthetic porphyrins: Role of chemical structure, intracellular targeting and antioxidant defense. J Photochem Photobiol B. 151:142-52 https://doi.org/10.1016/j.jphotobiol.2015.07.019 **FI 2015= 3.035**.

27. Simon T, Potara M, Gabudean AM, Licarete E, **Banciu M**, Astilean S. (2015) Designing Theranostic Agents Based on Pluronic Stabilized Gold Nanoaggregates Loaded with Methylene Blue for Multimodal Cell Imaging and Enhanced Photodynamic Therapy. ACS Appl Mater Interfaces. 7(30):16191-201. https://doi.org/10.1021/acsami.5b04734 **FI 2015= 7.145**.

28. Potara M, Bawaskar M, Simon T, Gaikwad S, Licarete E, Ingle A, **Banciu M**, Vulpoi A, Astilean S, Rai M. (2015) Biosynthesized silver nanoparticles performing as biogenic SERS-nanotags for investigation of C26 colon carcinoma cells. *Colloids Surf B Biointerfaces*. 133:296-303.https://doi.org/10.1016/j.colsurfb.2015.06.024 **FI 2015= 3.902**.

29. Pap PL, Pătraş L, Osváth G, Buehler DM, Versteegh MA, Sesarman A, **Banciu M**, Vágási CI. (2015) Seasonal Patterns and Relationships among Coccidian Infestations,Measures of Oxidative Physiology, and Immune Function in Free-Living House Sparrows over an Annual Cycle. Physiol Biochem Zool. 88(4):395-405. https://doi.org/10.1086/681243 **FI 2015=2.007**.

30. Tefas LR, Sylvester B, Tomuta I, Sesarman A, Licarete E, **Banciu M**, Porfire A.(2017) Development of antiproliferative long-circulating liposomes co-encapsulating doxorubicin and curcumin, through the use of a quality-by-design approach. *Drug Des Devel Ther*.11:1605-1621 https://doi.org/10.2147/DDDT.S129008 **FI 2017=2.935**.

31. Sylvester B, Porfire A, Muntean DM, Vlase L, Lupuţ L, Licarete E, Sesarman A, Alupei MC, **Banciu M**, Achim M, Tomuţă I.(2018) Optimization of prednisolone-loaded long-circulating liposomes via application of Quality by Design (QbD) approach. *J Liposome Res* 28(1): 49-61. https://doi.org/10.1080/08982104.2016.1254242 **FI 2018 = 2.507**.

32. Popa R, Licarete E, **Banciu M,** Sivestru A (2018) Organoselenium compounds containing pyrazole or phenylthiazole groups. Synthesis, structure, tin(IV) complexes and antiproliferative activity. Appl. Organomet Chem 32(4): e4252.https://doi.org/10.1002/aoc.4252 **FI 2018 = 3.259**.

33. Rauca VF, Vlase L, Casian T, Sesarman A, Gheldiu AM, Mocan A, **Banciu M**, Toiu A (2019) Biologically Active Ajuga Species Extracts Modulate Supportive Processes for Cancer Cell Development, *Front. Pharmacol*., 10:334. doi: 10.3389/fphar.2019.00334 eCollection 2019. https://doi.org/10.3389/fphar.2019.00334 **FI 2018= 3.845**.

34. Sesarman A, Muntean D, Abrudan B, Tefas L, Sylvester B, Licarete E, Rauca V, Luput L, Patras L, **Banciu M**, Vlase L, Porfire A. (2021). Improved pharmacokinetics and reduced side effects of doxorubicin therapy by liposomal co-encapsulation with curcumin J Liposome Res;31(1):1-10. https://doi.org/10.1080/08982104.2019.1682604 **FI 2019 = 2.455**.

35. Vieriu, SM, Somesan, AA, Silvestru, C, Licarete, E, **Banciu, M**, Varga, RA. (2021). Synthesis, structural characterization and in vitro antiproliferative effects of novel organotin(iv) compounds with nicotinate and isonicotinate moieties on carcinoma cells, New J Chem; 45 (2): 1020-1028. https://doi.org/10.1039/d0nj05069e **FI 2021=3.925.**

36. Popa R, David M, Licarete E, **Banciu M,** Sivestru A (2022). On the coordination behaviour of diorganoselenium ligands based on amino and azole functionalities: silver(i) complexes with relevance for biological applications, New J Chem; 46(48): 23019-23029.https://doi.org/10.1039/D2NJ04812D **FI 2022=3.3**.

37. Suarasan S, Campu A, Vulpoi A, **Banciu M**, Astilean S.(2022) Assessing the Efficiency of Triangular Gold Nanoparticles as NIR Photothermal Agents In Vitro and Melanoma Tumor Model. Int J Mol Sci. 23(22):13724. https://doi.org/10.3390/ijms232213724 **FI 2022=5.6**.

38. Tefas LR, Toma I, Sesarman A, **Banciu M**, Jurj A, Berindan-Neagoe I, Rus L, Stiufiuc R, Tomuta I. (2022) Co-delivery of gemcitabine and salinomycin in PEGylated liposomes for enhanced anticancer efficacy against colorectal cancer. J Liposome Res. 15:1-17. https://doi.org/10.1080/08982104.2022.2153139 **FI 2022=4.4**.

38. Corjuc L,Pop A, Licarete E, **Banciu M**, Silvestru A.(2024) Silver(I) complexes with diorganochalcogen ligands of type(2-MeC6H4CH2)2E (E = S, Se). Synthesis, structure and antiproliferative activity. Inorganica Chim. Acta.2024 Volume 565, 24 May 2024, 121972 https://doi.org/10.1016/j.ica.2024.121972 **FI 2023=2.7**.

39. Tiodar ED, Chiriac CM, Pošćić F, Văcar CL, Balázs ZR, Coman C, Weindorf DC, **Banciu M**, Krämer U & Podar D. (2024) Plant colonizers of a mercury contaminated site: trace metals and associated rhizosphere bacteria.Plant Soil https://doi.org/10.1007/s11104-024-06552-7 **FI 2023=3.9**.

40. Ranamalla, SR,Tavakoli, S, Porfire, AS, Tefas, LR, **Banciu, M**, Tomuta,I, Varghese, OP (2024) CARBOHYDRATE POLYMERS Volume: 339 Article Number: 122251 https://doi.org/10.1016/j.carbpol.2024.122251 **FI 2023=10.7**.

D. Publicaţii in extenso apărute în volume ale principalelor conferinţe internaţionale de specialitate - Selecţie cu maximum 20 lucrări în volume de conferinţe în ultimii 10 ani.

-

E. Alte lucrări şi contribuţii ştiinţifice

(lucrări științifice publicate în jurnale indexate în BDI, în calitate de autor principal sau coautor) în ultimii 10 ani

41.Rusu AD, Pătraș L, **Banciu M.** (2015) Overview on Nanoparticulate Formulations for 5-fluorouracil Delivery in Colorectal Cancer Treatment. *Studia Univ Babes-Bolyai, Biologia* 60 (2): 89-96.http://studia.ubbcluj.ro/download/pdf/Biologia_pdf/2015_2/08.pdf

42. Emilia A, Sabău F, Vădan A, Marinescu M, Licărete E, Roșioru C, Stoica AD, Dobre C, **Banciu M** (2024). Assessment of circulating biomarkers in a rat model of doxorubicin-induced cardiotoxicity.*Studia Universitatis Babeş-Bolyai, Biologia*, 2024, Vol 69, Issue 2, p7 https://studiabiologia.reviste.ubbcluj.ro/index.php/studiabio/article/view/214

F. Brevete obţinute în întreaga activitate

-

Data: **Semnătura:**

1/07/2025

A N E X A 4 . 1

Nume Prenume: **BUTIUC Anca-Livia**
Gradul didactic: Prof. Dr.
Instituția unde este titular: Universitatea Babeș-Bolyai
Facultatea: Biologie și Geologie
Departamentul: Biologie Moleculară și Biotehnologie

L I S T A
lucrărilor ştiinţifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat:

Titlul tezei de doctorat: **Cercetări privind organogeneza *in vitro* la unele plante rare.** Coordonator științific: Prof. Dr. Mihai Trifu, Universitatea Babeș-Bolyai. Diplomă de doctor nr. 27/10.09.2000, eliberată de Ministerul Educației Naționale.

Titlul tezei de abilitare: **Molecular markers, valuable tools for characterization of species and populations,** susținută la Universitatea Babeș-Bolyai. Atestat de abilitare: 5719/27.12.2017, eliberat de Ministerul Educației Naționale.

B. Cărți și capitole în cărți publicate în ultimii 10 ani

Cărți:

1. Farkas, A., Carpa, R., **Butiuc-Keul, A.L,** 2022, Biotehnologii generale. Ghid de lucrari practice. E-book, Ed. Presa Universitară Clujeană.

Capitole de carte:

2. Hegedus, A., Nagy-Szoke, T., **Butiuc-Keul, A,** 2016, Identificarea microorganismelor rezistente la antibiotice și a genelor ce conferă rezistență. În: Coman, C. (Ed.) Ghid metodologic de monitorizare a antibioticelor şi a rezistenţei la antibiotice în mediul înconjurător. Editura Accent, Cluj- Napoca, România, pp. 105-136.

3. Hegedus, A., Nagy-Szoke, T., **Butiuc-Keul, A,** 2016, Identification of microorganisms resistant to antibiotics and antibiotic resistance genes. In: Coman C. (Ed). Methodological guide for monitoring antibiotics and antibiotic resistance in the environment. Accent Publisher, Cluj-Napoca, Romania, pp. 277-306.

4. Coste, A., Pop, C., Halmagyi, A., **Butiuc-Keul, A.,** 2019, Secondary Metabolites in Shoot Cultures of *Hypericum*, In: Ramawat KG, Ekiert H, Goyal S, Eds, "Plant Cell and Tissue Differentiation and Secondary Metabolites", Reference Series in Phytochemistry, Springer Cham, Switzerland, pp. 1-27.

5. **Butiuc-Keul, A.** 2024. New biotechnological tools for grapevine improvement. In: Grapevine from origin to the vineyard, Lopes, P.F., Ed, Advances in Botanical Research, Vol. 110, Elsevier, pp. 295-341.

C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani

Articole indexate ISI

1. Farkas, A., Crăciunaş, C., Chiriac, C., Szekeres, E., Coman, C., **Butiuc-Keul., A.,** 2016, Exploring the role of coliform bacteria in class 1 integron carriage and biofilm formation during

drinking water treatment, Microb. Ecol., 72(4): 773-782. DOI 10.1007/s00248-016-0758-0

2. Farkas, A., Bocoș, B., **Butiuc-Keul., A.,** 2016, Antibiotic resistance and intI1 carriage in waterborne Enterobacteriaceae, Water Air Soil Pollution, 227: 251 doi:10.1007/s11270-016-2944.

3. Butiuc-Keul, A., Crăciunaș, C., Goia, I., Farkas, A., Cristea, V., 2018, Genetic structure of populations of several endangered and endemic *Dianthus* species revealed by microsatellite markers. Acta Bot Croatica.,77 (2): 181-188.

4. Cristea, V., Besenyei, E., Jarda, L., Farkas, A., Marcu, D., Clapa, D., Halmagyi, A., **Butiuc-Keul, A.,** 2019, *in situ* genetic variability and micropropagation of *Cerastium banaticum* (rochel) heuff. (Caryophyllaceae) – a rare and endemic species from Romania, Acta Biol Cracov, Ser Botanica, 6(1): 53-62.

5. Butiuc-Keul, A., Coste, A., Farkas, A., Cristea, V., Isac, V., Halmagyi, A., 2019, Molecular characterization of apple (Malus × domestica Borkh.) genotypes originating from three complementary conservation strategies. Turk J Agric Forestry, 43: 464-477.

6. Farkas, A., Mereuti, M., **Butiuc-Keul, A.,** Podar, D., Roba, C., Bălc, R., 2020, Effects of Long-term exposure to heavy metals upon rhizosphere bacteria from Baia Mare Area (Maramureş County, Romania), Geomicrobiol J, 37:9, 867-876.

7. Halmagyi, A., Coste, A., Jarda, L. **Butiuc-Keul, A.,** Holobiuc, I., Cristea, V., 2020, A safeguard measure of endemic and endangered plant species: cryostorage of *Dianthus* taxa. Biodivers Conserv 29: 3445–3460.

8. Toth, P, Fiț, D., Culda, C.A., Carpa, R., **Butiuc-Keul, A.,** Roba, C.A., Roșu, C., 2020, Quality assessment of drinking water from several private wells from Lazuri village (Satu-Mare County, Romania), J Environ Protection and Ecol., 21(1): 106–115.

9. Butiuc-Keul, A., Carpa, R., Podar, D., Szekers, E., Muntean, V., Iordache, D., Farkas, A., 2021, Antibiotic Resistance in *Pseudomonas* spp. Through the Urban Water Cycle. Curr. Microbiol., **78,** 1227–1237.

10. Butiuc-Keul, A., Farkas, A., Carpa, R., Iordache, D. CRISPR-Cas System: The Powerful Modulator of Accessory Genomes in Prokaryotes, Microb. Physiol., (inițial J Molec Microbiol Biotechnol) online.

11. Dobrota, C.T., Carpa, R., **Butiuc-Keul, A,** 2021, Analysis of designs used in monitoring crop growth based on remote sensing methods. Turk J Agric Forestry, 45(6), 730-742.

12. Paskucza, S., Carpa, R., Culda, C.A., **Butiuc-Keul, A.L.,** Dobrota, C., Berchez, O., Rusu, T., 2021, Biochemical composition of blackcurrant fruits in a plantation from Jibou area. Agrolife Sci J, 10(1): 179-184.

13. Butiuc-Keul, A., Coste, A., Budahn, H., Dunemann, F., Farkas, A., Postolache, D., Klocke, K. 2022, Analysis of *Hypericum* accessions by DNA fingerprinting and flow cytometry. Acta Bot Croatica, 1(1): 1-11. https://doi.org/10.37427/botcro-2021-026.

14. Butiuc-Keul, A., Coste, A., Postolache, D., Laslo, V., Halmagyi, A., Cristea, V., Farkas, A., 2022, Molecular characterization of *Prunus* cultivars from Romania by microsatellite markers. Horticulturae 8(291). https://doi.org/10.3390/horticulturae8040291.

15. Butiuc-Keul, A, Farkas, A., Carpa, R., Dobrota, C.T., Iordache, D., 2022, Development of smart fruit crops by genome editing. Turk J Agric Forestry, 46, 129-140.

16. Toc, D.A., **Butiuc-Keul, A.L**., (corespondent) Iordache, D., Botan, A., Mihaila, R.M., Costache, C.A., Colosi, I.A., Chiorean, C., Neagoe, D.S., Gheorghiu, L., Junie, L.M. 2022, Descriptive analysis of circulating antimicrobial resistance genes in vancomycin-resistant Enterococcus (VRE) during the COVID-19 pandemic. Biomedicines, 10(5): 1122. https://doi.org/10.3390/biomedicines10051122.

17. Hurdu, B.I., Coste, A., Halmagyi, A., Szatmari, P.M., Farkas, A., Puscas, M., Turtureanu, P.D., Rosca-Casian, O., Tănase, C., Oprea, A., Mardari, C., Rădutoiu, D., Comănescu, P.C., Sîrbu, I.M., Stoie, A., Lupoae, P., Cristea, V., Jarda, L., Holobiuc, I., Goia, I., Cătană, C., **Butiuc-Keul, A.** 2022. Ex situ conservation of plant diversity in Romania: a synthesis of threatened and endemic taxa. J. Nat. Conserv., 68: 126211. https://doi.org/10.1016/j.jnc.2022.126211.

18. Carpa, R., Remizovschi, A., Culda, C.A., **Butiuc-Keul, A.L.,** 2022, Inherent and composite

hydrogels as promising materials to limit antimicrobial resistance. Gels, 8(70). https://doi.org/10.3390/gels8020070.
19. Farkas, A., Coman, C., Szekeres, E., Teban-Man, A., Carpa, R., **Butiuc-Keul, A.,** 2022, Molecular typing reveals environmental dispersion of antibiotic-resistant Enterococci under anthropogenic pressure. *Antibiotics*, 11(9):1213. https://doi.org/10.3390/antibiotics11091213.
20. Iordache, D., Baci, G.M., Căpriță, O., Farkas, A., Lup, A., **Butiuc-Keul, A.,** 2022. Correlation between CRISPR Loci Diversity in Three Enterobacterial Taxa. International Journal of Molecular Sciences, 23(21), 12766.
21. Butiuc-Keul, A., Coste, A., 2023. Biotechnologies and Strategies for Grapevine Improvement. Horticulturae, 9(1), 62.
22. Carpa, R., Farkas, A., Dobrota, C. and **Butiuc-Keul, A.,** 2023. Double-network chitosan-based hydrogels with improved mechanical, conductive, antimicrobial, and antibiofouling properties. Gels, 9(4), p.278.
23. Halmagyi, A.; **Butiuc-Keul, A.**; Keul, M.; Dobrotă, C.; Fodorpataki, L.; Pintea, A.; Mocan, A.; Pop, V.; Coste, A. 2023, Impact of Arieş River Contaminants on Algae and Plants. Toxics, 11, 817.
24. Costache, C., Colosi, I., Toc, D. A., Daian, K., Damacus, D., Botan, A., ... & **Butiuc-Keul, A.** 2024. CRISPR-Cas System, Antimicrobial Resistance, and Enterococcus Genus—A Complicated Relationship. *Biomedicines*, *12*(7).
25. Dobrescu, M.-Ș.; Țoc, D.-A.; Pană, A.-G.; Costache, C.; **Butiuc-Keul, A.,** 2025, The difference a year can make: How antibiotic resistance mechanisms in *Pseudomonas aeruginosa* have changed in Northwestern Transylvania. Biomolecules, 15, 1. https://doi.org/10.3390/biom15010001.
26. Boghean, S.O., Militaru, M., Gherghina (Mareși), E., Sestras, R.E., Andrecan, A.F., Borsai, O., Dan, C., Sestras, A.F., **Butiuc-Keul, A.L.,** 2025, Effect of the ripening period on the quality attributes of pear fruit. Horticulturae, *11*(5), 468; https://doi.org/10.3390/horticulturae11050468.
27. Toth, P, Fiț, D., Culda, C.A., Carpa, R., **Butiuc-Keul, A.,** Roba, C.A., Roșu, C., 2020, Quality assessment of drinking water from several private wells from Lazuri village (Satu-Mare county, Romania), J Environ Protection and Ecol., 21(1): 106–115.
28. Paskucza, S., Carpa, R.,Culda, C.A., **Butiuc-Keul, A.L.,** Dobrota, C.,Berchez, O.,Rusu, T., 2021, Biochemical composition of blackcurrant fruits in a plantation from Jibou area. Agrolife Sci J, 10(1): 179-184.
29. Barbu, I.A., Ciorîță, A., Carpa, R., Moț, A.C., **Butiuc-Keul, A.**, Pârvu, M., 2023. Phytochemical Characterization and Antimicrobial Activity of Several Allium Extracts. Molecules, 28(10), p.3980.
30. Barbu, I. A., Toma, V. A., Moț, A. C., Vlase, A. M., **Butiuc-Keul, A.,** & Pârvu, M. 2024. Chemical composition and antioxidant activity of six Allium extracts using protein-based biomimetic methods. *Antioxidants*, *13*(10), 1182.
31. Pană, A.G., Șchiopu, P., Țoc, D.A., Neculicioiu, V.S., **Butiuc-Keul, A.,** Farkas, A., Dobrescu, M-Ș., Flonta, M., Costache, C., Szasz, I.E., Junie, L.M. 2025. Clonality and the Phenotype–Genotype Correlation of Antimicrobial Resistance in Acinetobacter baumannii Isolates: A Multicenter Study of Clinical Isolates from Romania. *Microorganisms*, *13*(1), 176. https://doi.org/10.3390/microorganisms13010176.

Articole indexate BDI

32. Keul, M., **Butiuc-Keul, A.,** Halmagyi, A., Șuteu, A., 2015, Samenkeimung, Blattprotein-und Assimilationspigmentgehalte, sowie Isoperoxidasen-und Isoesterasennachweis bei *Filipendula ulmaria* (L.) Maxim, Stud. Cercet. Biol. Bistriţa, 20: 5-20.
33. Butiuc-Keul, A.L., Crăciunaş, C., Dobrotă, C., Clapa, D., 2015, Molecular characterization of new black currant cultivars bred in Romania exposed changing climate conditions, Acta Hortic., (ISHS) 1100: 155-159.
34. Butiuc-Keul, A., Farkas, A., Cristea, V., 2016, Genetic stability assessment of in vitro plants by molecular markers, Stud. Univ. Babes-Bolyai, Biol., LX1, 1, 107-114.

35. Farkas, A., Tarco, E., Crăciunaş, C., Bocoş, B., **Butiuc-Keul, A.,** 2017, Screening for phenotypic and genotypic resistance to antibiotics in Gram positive pathogens, Stud. Univ. Babes- Bolyai, Biol.,

LXII, 2, 85-96.
36. Butiuc-Keul, A.L., Jarda, L., Goia, I., Holobiuc, I., Farkas, A., Cristea, V., 2018, Preliminary data regarding genetic diversity of several endangered and endemic *Dianthus* species from Romania generated by RAPD markers, Stud. Univ. Babes-Bolyai, Biol., LXIII, 1, 59-72.
37. Butiuc-Keul, A., Fiț, D., Farkas, A., 2019, Trends in molecular biology of several fruit trees, JOJ Hortic. Arboric., 2(3): JOJHA.MS.ID.555588 (2018).
38. Butiuc-Keul, A., Goia, I., Cristea, V. Fiț, D., Șuteu, A., Farkas, A., 2019, RAPD markers associated with linolenic acid synthesis in several *Boraginaceae* plant species, Analele Universitatii din Oradea, Fasc. Biologia, Tom XXVI, 1, 62-66.
39. Farkas, A., Tarco, E., **Butiuc-Keul, A.,** 2019, Antibiotic resistance profiling of pathogenic Enterobacteriaceae from Cluj-Napoca, Romania, GERMS 9(1): 17-27
40. Carpa, R., Culda, C., Dejeu, C., **Butiuc-Keul, A.,** 2019, Microbial activity in soils from the Făgăraș Mountains, Stud. Univ. Babes-Bolyai, Biol., 64(1): 55-66.
41. Dobrescu, M.Ș., Iordache, D., **Butiuc-Keul, A.,** 2022, Revealing the CRISPR array in bacteria living in our organism Stud. Univ. Babes-Bolyai, Biol., 67(1): 131-142.

D. Lucrări publicate în ultimii 10 ani în reviste și volume de conferințe cu referenți (neindexate)

-

E. Brevete obținute în întreaga activitate

-

Data: 01.07.2025

Semnătura:
Prof. Dr. BUTIUC Anca-Livia

A N E X A 4 . 1

Nume Prenume: **Cimpoiu Claudia-Valentina**
Gradul didactic: Profesor

Instituția unde este titular: Universitatea Babeș-Bolyai

Facultatea: Facultatea de Chimie si Inginerie Chimica
Departamentul: de Chimie

L I S T A
lucrărilor ştiinţifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat Doctorat in Chimie - Chimie analitica/Cromatografie

B. Cărţi si capitole în cărţi publicate în ultimii 10 ani

3 capitole carte

1. Cimpoiu C., Hosu A. (2014). Chapter 16 - "TLC of anxiolytics and sedatives" in *Thin Layer Chromatography in Drug Analysis*, Edited by Lukasz Komsta, Monika Waksmundzka- Hajnos and Joseph Sherma, CRC Press - Taylor & Francis Group (ISBN 9781466507159), p.279-322.
2. Hosu A., Cimpoiu C. (2014). Chapter 45 - "Thin-Layer Chromatography of tuberculostatic drugs" in *Thin Layer Chromatography in Drug Analysis*, Edited by Lukasz Komsta, Monika Waksmundzka Hajnos and Joseph Sherma, CRC Press - Taylor & Francis Group (ISBN-9781466507159), p. 865-874.
3. Cimpoiu C., Hosu A., Miclaus V. (2013). Analysis of Antioxidant Compounds in Different Types of Tea. In Tea Health and Disease Prevention, Victor R. Preedy ed., Elsevier, p. 79-89.

C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani

44 lucrari indexate ISI/BDI

1. Baumli, J., Antal, N., Casoni, D., Cimpoiu, C. (2023). Use of Secondary Metabolites Profiling and Antioxidant Activity to Unravel the Differences between Two Species of Nettle. *Plants*, 12, 3233. https://doi.org/10.3390/plants 12183233.
2. Scrob, T., Filip, G.A., Baldea, I., Varodi, S.M., Cimpoiu, C. (2023). Sweeteners' influence on in vitro α-glucosidase inhibitory activity, cytotoxicity, stability and in vivo bioavailability of the anthocyanins from lingonberry jams. *Foods*, 12, 2569. https://doi.org/10.3390/foods12132569
3. Tarna, A., Cimpoiu, C., Hosu, A. (2023). Integrated methods for fingerprinting of monofloral honeys. *Journal of Liquid Chromatography and Related Techniques*. https://doi.org/10.1080/10826076.2023.2224024
4. Szasz, M., Casoni, D., Cimpoiu, C. (2023). Study on binding affinity profile, bioactivity, and lipophilicity of selected antipsychotic drugs. *Journal of Liquid Chromatography and Related Techniques.* https://doi.org/10.1080/10826076.2023.2216780

5. Hosu, A., Cimpoiu, C. (2022). A cost-effective and rapid method base on high-performance thin-layer chromatography in evaluating the roasted coffee adulteration. *Studia Universitatis Babes-Bolyai Chemia*, LXVII(4), 11-17. DOI:10.24193/subbchem.2022.4.01
6. Costea, L.M., Rad, R., Cimpoiu, C., Meghesan, A. (2022). Determination of 2,4-dichlorophenoxyacetic acid (2,4-D) from tomatoes by LC-MS/MS analysis. *Studia Universitatis Babes-Bolyai Chemia*, LXVII(4), 249-259. DOI:10.24193/subbchem.2022.4.16
7. Scrob, T., Varodi S.M., Vintilă G.A., Casoni, D., Cimpoiu, C. (2022). Estimation of degradation kinetics of bioactive compounds in several lingonberry jams as affected by different sweeteners and storage conditions. *Food Chemistry: X*, 16, 100471. https://doi.org/10.1016/j.fochx.2022.100471
8. Scrob, T., Covaci, E., Hosu, A., Tanaselia, C., Casoni, D., Török, A. I., Frentiu,T., Cimpoiu, C. (2022). Effect of in vitro simulated gastrointestinal digestion on some nutritional characteristics of several dried fruits. *Food Chemistry*, 385, 132713. https://doi.org/10.1016/j.foodchem.2022.132713
9. Scrob, T. Hosu, A., Cimpoiu, C. (2022). Sweeteners from different lingonberry jams influence on bioaccessibility of vitamin C, anthocyanins and antioxidant capacity under in vitro gastrointestinal digestion. *Antioxidants*, 11, 442. https://doi.org/10.3390/antiox11030442
10. Hosu, A., Cimpoiu, C. (2022). High-performance thin-layer chromatography evaluation of the counterfeiting of vanilla flavoring. *JPC-Journal of planar chromatography-modern TLC*, 35, 1-5. https://doi.org/10.1007/s00764-022-00179-z
11. Cimpoiu, C., Milna, A., Danciu, V., Hosu, A. (2021). The influence of assortment of beer on their antioxidant / pro-oxidant capacity and phenolic fingerprint. *Studia Universitatis Babes-Bolyai Chemia*, LXVI, 23-40. https://doi.org/10.24193/subbchem.2021.2.02
12. Vicol, C., Cimpoiu, C., Duca, G. (2021). Investigation of synergic/anti-synergic interactions of dihydroxifumaric acid and ascorbic acid with DPPH. *Studia Universitatis Babes-Bolyai Chemia*, LXVI, 49-58. https://doi.org/10.24193/subbchem.2021.2.04
13. Seck, I., Hosu, A., Cimpoiu, C., Ndoye, S.F., Ba, L.A., Sall, C., Seck, M. (2021). Phytochemicals content, screening and antioxidant/pro-oxidant activities of Carapa procera (barks) (Meliaceae). *South African Journal of Botany*, 137, 369-376. https://doi.org/10.1016/j.sajb.2020.11.019
14. Hosu, A., Cimpoiu C. (2020). Evaluation of various biological activities of natural compounds by TLC/HPTLC. *Journal of Liquid Chromatography & Related Technologies*, 43(9-10), 305-318. https://doi.org/10.1080/10826076.2020.1725548
15. Bora F.D., Calugar A., Bunea C.I., Petrescu Mag V., Cimpoiu C., Filimon V.R. (2019). Trace metal concentration and human health. Risk assessment in distilled alcoholic beverages in Romania. *Studia UBB Chemia*, LXIV, 4, 157-176. DOI:10.24193/subbchem.2019.4.12
16. Scrob T., Hosu A., Cimpoiu C. (2019). The Influence of in Vitro Gastrointestinal Digestion of Brassica oleracea Florets on the Antioxidant Activity and Chlorophyll, Carotenoid and Phenolic Content. *Antioxidants* 8(212) 1-11.
17. Scrob T., Hosu A., Cimpoiu C. (2019) Trends in analysis of vegetables by high performance TLC. *Journal of Liquid Chromatography & Related Technologies*, 42(9-10), 249-257

18. Donici A., Gal E., Cimpoiu C., Bunea C.I., Bora F.D. (2018). Multi-element composition of red and white wines from Bujoru, Smulti and Oancea wine center, Romania. *Studia UBB Chemia*, LXIII, 4, 113-128. DOI:10.24193/subbchem.2018.4.09
19. Farcas A.D., Mot A.C., Zagrean-Tuza C., Toma V., Cimpoiu C., Hosu A., Parvu M., Roman I., Silaghi-Dumitrescu R. (2018). Chemo-mapping and biochemical-modulatory and antioxidant/prooxidant effect of *Galium verum* extract during acute restraint and dark stress in female rats. *PLoS ONE* 13(7): e0200022. https://doi.org/10.1371/journal.pone.0200022
20. Danciu V., Hosu A., Cimpoiu C. (2018). Thin-layer chromatography in spices analysis. *Journal of Liquid Chromatography & Related Technologies* 41(6), 282-300. DOI: 10.1080/10826076.2018.1447895
21. Meghesan-Breja A., Hosu A., Cimpoiu C. (2017). Identification and Quantification of some pesticide metabolites from vegetables by GC-TOF-MS and LC-MS-QQQ. *Studia UBB Chemia*, LXII, 3, 19-34.
22. Hosu A., Cimpoiu C. (2017). Thin-layer chromatography applied in quality assessment of beverages derived from fruits. *Journal of Liquid Chromatography & Related Technologies* 49(5-6), 239-246.
23. Hosu A., Cimpoiu C., Luminita D., Moldovan B. (2016). Study of the Antioxidant Property Variation of Cornelian Cherry Fruits during Storage Using HPTLC and Spectrophotometric Assays. *Journal of Analytical Methods in Chemistry*, Volume 2016, Article ID 2345375, 5 pages. http://dx.doi.org/10.1155/2016/2345375.
24. Porteka B., Mot A.C., Cimpoiu C., Hosu A., Bischin C., Damian G., Fischer Fodor E., Silaghi Dumitrescu R. (2016). Selective Protective Effect of Antioxidant-rich Rumex acetosa Extracts, *Revista de Chimie (Bucharest)*, 67(5), 833-837.
25. Hosu A. Floare-Avram V., Magdas A.D., Feher I., Inceu M., Cimpoiu C. (2016). The Influence of the Variety, Vineyard, and Vintage on the Romanian White Wines Quality. *Journal of Analytical Methods in Chemistry*, Volume 2016, Article ID 4172187, 10 pages, http://dx.doi.org/10.1155/2016/4172187.
26. Danciu V., Hosu A., Cimpoiu C., (2016). Comparative evaluation of antioxidant activity using 1,1-diphenyl-2-picrylhydrazyl and 2,2'-azino-bis(3-Ethylbenzothiazoline-6-Sulphonic Acid) methods, *Journal of Planar Chromatography-Modern TLC*, 29(4), 306-309.
27. Moldovan B., Hosu A., David L., Cimpoiu C., (2016). Total phenolics, total anthocyanins, antioxidant and pro-oxidant activity od some red fruits teas, *Acta Chimica Slovenica*, 63(2), 213-219.
28. Hosu A., Cimpoiu C., (2016). HPTLC fingerprinting: A useful tool for white wines authentication. *Journal of Liquid Chromatography & Related Technologies*, 39(5-6), 303-307.
29. Hosu A., Cimpoiu C. (2015). A simple TLC method for evaluation of nicotine in cigarettes. *Studia UBB Chemia*, LX, 4, 107-114.
30. Hosu A., Danciu V., Cimpoiu C. (2015). Validated HPTLC fingerprinting and antioxidant activity evaluation of twenty-seven Romanian red wines, *Journal of Food Composition and Analysis*, 41, 174-180.
31. Muresan B., Cimpoiu C., Hosu A., Bischin C., Gal E., Damian G., Fischer-Fodor E., Silaghi-

Dumitrescu R. (2015). Antioxidant content in romanian traditional distilled alcoholic beverages. *Studia UBB Chemia*, LX, 2 (Tom II), 355-370.

32. Meghesan-Breja A., Cimpoiu C., Hosu, A., (2015). Multiresidue analysis of pesticides and metabolites from fruits and vegetables by gas chromatography-time-of-flight mass spectrometry. *Acta Chromatographica*, 27(4), 657–685.
33. Avram V., Floare C.G., Hosu A., Cimpoiu C., Măruţoiu C., Moldovan Z., (2015). Characterization of Romanian Wines by Gas Chromatography-Mass Spectrometry. *Analytical Letters*, 48(7), 1099-1116.
34. Inceu M., Sandu I., Hosu A., Pascu L.F., Cimpoiu C., (2015) Study Concerning Pesticide Residues in Twenty-seven Romanian White Wines. *Revista de Chimie (Bucharest)*, 66(3), 368-372.
35. Hosu A., Pop B., Cimpoiu C. (2015). The Forensic Analysis of Pigments from Some Inks by HPTLC. *Journal of Liquid Chromatography & Related Technologies*, 38, 1109-1112.
36. Meghesan-Breja A., Măruţoiu C., Cimpoiu C., (2015). Multi-residues Analysis for 88 Pesticides and Metabolites from Soil by Gas Chromatography-time - of - Flight Mass Spectrometry. *Revista de Chimie (Bucharest)*, 66(1), 32-38.
37. Avram V., Voica C., Hosu A., Cimpoiu C., Măruţoiu C., (2014). ICP-MS characterization of some Roumanian white wines by their mineral content. *Revue Roumaine de Chimie*, 59, 11-12.
38. Avram V., Magdas D.A., Voica C., Cristea G., Cimpoiu C., Hosu A., Marutoiu C., (2014). Isotopic Oxygen Ratios and Trace Metal Determination in Some Romanian Commercial Wine, *Analytical Letters*, 47(4), 641-653.
39. Hosu A., Cristea V.M., Cimpoiu C., (2014). Analysis of total phenolic, flavonoids, anthocyanins and tannins content in Romanian red wines: Prediction of antioxidant activities and classification of wines using artificial neural networks, *Food Chemistry*, 150, 113-118.
40. David L., Hosu A., Moldovan B., Cimpoiu C. (2014). Evaluation and authentication of red fruits teas by high performance thin-layer chromatographic fingerprinting. *Journal of Liquid Chromatography & Related Technologies* 37(12), 1644-1653.
41. Puscas A., Hosu A., Cimpoiu C. (2013). Application of a newly developed and validated high-performance thin-layer chromatographic method to control honey adulteration. *Journal of Chromatography A*, 1272, 132-135.
42. Cimpoiu C., Hosu A., Miclaus V., Puscas A. (2013). Determination of the floral origin of some Romanian honeys on the basis of physical and biochemical properties. *Spectrochimica Acta A* 100, 149-154.
43. Bora F.D., Donici A., Voica C., Rusu T., Cozmuța L.M., Cozmuța A.M., Cimpoiu C., Mihăiescu D.E. (2016). The determination of $^{206}Pb/^{207}Pb$, $^{208}Pb/^{206}Pb$ and $^{87}Sr/^{86}Sr$ isotope rations by ICP-MS for fingerprinting the South-East Romanian wines, *AAB Bioflux*, 8(3), 129-142.
44. Bora F.D., Donici A., Voica C., Rusu T., Cimpoiu C., Nicula C., Peter A., Bunea C.I., Pop N., Mihăiescu D.E. (2016). Inductively coupled plasma-mass spectrometry (ICP-MS) characterization of some white wines from Dealu Bujorului Vineyard by their mineral content, *AAB Bioflux*, 8(3), 156-175.

D. Lucrări publicate în ultimii 10 anii în reviste şi volume de conferinţe cu referenţi (neindexate)

- Reviste

- Selecţie cu maximum 20 lucrări în volume de conferinţe

E. Brevete obţinute în întreaga activitate

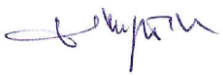
1 brevet

1. Process for depolluting water containing medicamental hormonal and xenoestrogenic organic substances, RO125296-A2, Chintoanu M., Cimpoiu C., Costineanu D., Ferenczi L., Ghirisan A., Miclaus V., Miclean M., Ozunu A., Roman, C. (2010).

Nota: Datele sunt preluate din Baza de date Managementul Cercetarii si prezentate in extenso in Anexa Indicatori de calitate pe 10 ani.

Data:
01.07.2025

Semnătura:



A N E X A 4 . 1

Nume Prenume: **Cormoș Călin-Cristian**
Gradul didactic: Profesor dr. ing.

Instituția unde este titular: Universitatea Babeș-Bolyai

Facultatea: Chimie și Inginerie Chimică
Departamentul: Inginerie Chimică

L I S T A
lucrărilor ştiinţifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

Modelarea matematică şi simularea sintezei pantotenatului de calciu racemic, 2004, Universitatea Babeș-Bolyai, coordonatorul științific: Prof. dr. ing. Paul-Șerban Agachi, domeniul de doctorat: Inginerie chimică

B. Cărţi si capitole în cărţi publicate în ultimii 10 ani

1. **C.C. Cormos,** *IGCC with carbon capture and storage*, Encyclopedia of Sustainable Technologies, 2017, 327-338.

C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani

1. V.C. Sandu, **C.C. Cormos**, A.M. Cormos, *Green hydrogen production via chemical looping: fuel reactor modeling with iron-based oxygen carriers*, Clean Technologies and Environmental Policy, 2025, 120076
2. **C.C. Cormos**, *Solar-based calcium looping power plant with thermo-chemical energy storage capability: A techno-economic and environmental (LCA) analysis*, Renewable Energy, 251, 2025, 123431
3. **C.C. Cormos,** *Techno-economic and environmental life cycle analysis of renewable-based combined potassium - calcium looping cycle for direct air CO_2 capture*, Journal of Environmental Chemical Engineering, 13, 2025, 116601
4. J. Čespiva, D. Kupka, J. Ryšavý, L. Niedzwiecki, W.H. Chen, M. Jackowski, C.C. Wang, J.K. Kuo, A. Trusek, **C.C. Cormos**, T. Ochodek, *Life cycle assessment of solid recovered fuel (SRF) for energy sector in declining coal region: Environmental burden of SRF production*, Energy Conversion and Management: X, 26, 2025, 100989

5. L. Petrescu, S.C. Galusnyak, A.C. Bozonc, **C.C. Cormos**, R. Scaccabarozzi, M. Spinelli, E. Catalanotti, *Bio-Combined Heat & power plant integrated with calcium looping: How environmentally friendly this integration is?*, Journal of Cleaner Production, 498, 2025, 145183
6. S.C. Galusnyak, L. Petrescu, D.A. Chisalita, **C.C. Cormos**, *Techno-environmental assessment of methanol production using chemical looping technologies*, Energy, 318, 2025, 134808
7. **C.C. Cormos**, *Techno-economic and environmental assessment of green hydrogen production via biogas reforming with membrane-based CO_2 capture*, International Journal of Hydrogen Energy, 101, 2025, 702-711
8. **C.C. Cormos**, *Decarbonized green hydrogen production by sorption-enhanced biomass gasification: An integrated techno-economic and environmental evaluation*, International Journal of Hydrogen Energy, 95, 2024, 592-603
9. S.C. Galusnyak, L. Petrescu, A. Imre-Lucaci, **C.C. Cormos**, *Towards value-added chemicals: Technical and environmental life cycle assessment evaluation of different glycerol valorisation pathways*, Sustainable Energy Technologies and Assessments, 72, 2024, 104043
10. **C.C. Cormos**, M. Dragan, L. Petrescu, A.M. Cormos, S. Dragan, A.M. Bathori, S.C. Galusnyak, *Synthetic natural gas (SNG) production by biomass gasification with CO2 capture: Techno-economic and life cycle analysis (LCA)*, Energy, 312, 2024, 133507
11. F.M. Ilea, **C.C. Cormos**, S. Dragan, A.M. Cormos, *Techno-economic implications of three phase fluidized bed absorption column applied to power generation for an intensified carbon capture process*, Energy Conversion and Management, 315, 2024, 118790
12. S.C. Galusnyak, L. Petrescu, A.M. Cosprundan, **C.C. Cormos**, *Biodiesel production using various methanol sources and catalytic routes: A techno-environmental analysis*, Renewable Energy, 232, 2024, 121051
13. V.C. Sandu, A.D. Selejan, **C.C. Cormos**, A. Pop, A.M. Cormos, *High-temperature dolomite decomposition: An integrated experimental and computational fluid dynamics analysis for calcium looping and industrial applications*, Applied Thermal Engineering, 253, 2024, 123742
14. F.M. Ilea, A.M. Cormos, S. Dragan, V.C. Sandu, **C.C. Cormos**, *Performance of industrially implemented turbulent contact absorbers - A comparative study*, Chemical Engineering Research and Design, 203, 2024, 346-356
15. **C.C. Cormos**, L. Petrescu, A.M. Cormos, S. Dragan, *Solar-driven Calcium Looping Cycle for Time-flexible Carbon-free Power Generation with Thermochemical Energy Storage Capability*, Computer Aided Chemical Engineering, 53, 2024, 2017-2022

16. L. Petrescu, O. Beudean, S.C. Galusnyak, **C.C. Cormos**, *A CHEMCAD Software Design Approach for Non-Conventional Biodiesel Production Using Methyl Acetate as Feedstock*, Energies, 17 (17), 2024, 4504

17. F.M. Ilea, A.M. Cormos, V.M. Cristea, **C.C. Cormos**, *Hybrid Advanced Control Strategy for Post-Combustion Carbon Capture Plant by Integrating PI and Model-Based Approaches*, Energies, 17 (12), 2024, 2886

18. A.C. Bozonc, V.C. Sandu, **C.C. Cormos**, A.M. Cormos, *3D-CFD Modeling of Hollow-Fiber Membrane Contactor for CO_2 Absorption Using MEA Solution*, Membranes, 14 (4), 2024, 86

19. V.C. Sandu, **C.C. Cormos**, A.M., Cormos, *CFD simulation of syngas chemical looping combustion with randomly packed ilmenite oxygen carrier particles*, Clean Technologies and Environmental Policy, 26, 2024, 129-147

20. **C.C. Cormos**, L. Petrescu, A.M. Cormos, *Green Hydrogen Production based on Biogas Reforming Integrated with Membrane-based CO_2 Capture*, Chemical Engineering Transactions, 114, 2024, 343 – 348

21. V.C. Sandu, **C.C. Cormos**, A.M. Cormos, *Multiscale CFD modelling of syngas-based chemical looping combustion in a packed bed reactor with dynamic gas switching technology*, Journal of Environmental Chemical Engineering, 11, 2023, 111381

22. **C.C. Cormos**, M. Sandru, C. Dinca, F.M. Ilea, A. Dudu, M.D. Lazar, N. Slavu, C. Sava, L. Petrescu, A.M. Cormos, I. Dumbrava, *Comparison of membrane-based pre- and post-combustion CO_2 capture options applied in energy-intensive industrial applications*, STUDIA UBB CHEMIA, LXVIII, 3, 2023 51-70

23. **C.C. Cormos**, M. Dragan, L. Petrescu, S. Dragan, A.M. Cormos, S.C. Galusnyak, F.M. Ilea, A.M. Bathori, *Techno-economic evaluation of synthetic natural gas production based on biomass gasification with CO_2 capture*, 26-th Conference on Process Integration for Energy Saving and Pollution Reduction (PRES'23), 8 - 11 October 2023, Thessaloniki, Greece, published in Chemical Engineering Transactions, 103, 2023, 7-12

24. A.D. Selejan, V.C. Sandu, A.M. Cormos, S. Dragan, **C.C. Cormos**, *CFD Analysis of a Packed Bed Reactor for Green Hydrogen Production by Biogas Reforming*, 26-th Conference on Process Integration for Energy Saving and Pollution Reduction (PRES'23), 8 - 11 October 2023, Thessaloniki, Greece, published in Chemical Engineering Transactions, 103, 2023, 337-342

25. **C.C. Cormos**, L. Petrescu, A.M. Cormos, S. Dragan, C. Dinca, M. Sandru, *Integration of renewable energy and CO_2 capture and utilization technologies for decarbonization of energy intensive process industries*, Computer Aided Chemical Engineering, 52, 2023, 2777-2784
26. A.D. Selejan, S. Dragan, A.M. Cormos, M. Dragan, **C.C. Cormos**, *Multi-scale modeling and techno-economic analysis of biogas catalytic reforming for hydrogen & power production with CO_2 capture feature*, Computer Aided Chemical Engineering, 52, 2023, 1367-1372
27. F.M. Ilea, A.M. Cormos, S. Dragan, **C.C. Cormos**, *Performance analysis of three-phase fluidized bed absorber for CO_2 capture industrial application*, Computer Aided Chemical Engineering, 52, 2023, 1693-1698
28. A.D. Selejan, H. Lisei, A.M. Cormos, S. Dragan, **C.C. Cormos**, *Development of a multi-scale mathematical model for green hydrogen production via biogas steam reforming process*, International Journal of Hydrogen Energy, 52, 2024, 469-484
29. **C.C. Cormos**, *Deployment of integrated Power-to-X and CO_2 utilization systems: Techno-economic assessment of synthetic natural gas and methanol cases*, Applied Thermal Engineering, 231, 2023, 120943
30. S.C. Galusnyak, L. Petrescu, V.C. Sandu, **C.C. Cormos**, *Environmental impact assessment of green ammoniacoupled with urea and ammonium nitrate production*, Journal of Environmental Management, 343, 2023, 118215
31. A.M. Cormos, L. Petrescu, **C.C. Cormos**, *Techno-economic implications of time-flexible operation for iron-based chemical looping combustion cycle with energy storage capability*, Energy, 278, 2023, 127746
32. F.M. Ilea, A.M. Cormos, V.M. Cristea, **C.C. Cormos**, *Enhancing the post-combustion carbon dioxide carbon capture plant performance by setpoints optimization of the decentralized multi-loop and cascade control system*, Energy, 275, 2023, 127490
33. **C.C. Cormos**, *Green hydrogen production from decarbonized biomass gasification: An integrated techno-economic and environmental analysis*, Energy, 270, 2023, 126926
34. S.C. Galusnyak, L. Petrescu, D.A. Chisalita, **C.C. Cormos**, M. Ugolini, *From secondary biomass to bio-methanol through CONVERGE technology: An environmental analysis*, Energies, 16, 2023, 2726
35. S.C. Galusnyak, L. Petrescu, **C.C. Cormos**, *Environmental impact assessment of post-combustion CO_2 capture technologies applied to cement production plants*, Journal of Environmental Management, 320, 2022, 115908

36. D.A. Chisalita, L. Petrescu, S.C. Galusnyak, **C.C. Cormos**, *Environmental evaluation of hydrogen production employing innovative chemical looping technologies – A Romanian case study*, International Journal of Hydrogen Energy, 48, 2023, 12112 - 12128

37. S.C. Galusnyak, L. Petrescu, D.A. Chisalita, **C.C. Cormos**, *Life cycle assessment of methanol production and conversion into various chemical intermediates and products*, Energy, 259, 2022, 124784

38. F.M. Ilea, A.M. Cormos, S. Dragan, **C.C. Cormos**, *Assessment of turbulent contact absorber hydrodynamics with application in carbon capture*, Chemical Engineering Journal, 449, 2022, 137674

39. S.C. Galusnyak, L. Petrescu, **C.C. Cormos**, *Classical vs. reactive distillation technologies for biodiesel production: An environmental comparison using LCA methodology*, Renewable Energy, 192, 2022, 289-299

40. **C.C. Cormos**, *Decarbonization options for cement production process: A techno-economic and environmental evaluation*, Fuel, 320, 2022, 123907

41. **C.C. Cormos**, A.M. Cormos, L. Petrescu, S. Dragan, *Techno-economic assessment of decarbonized biogas catalytic reforming for flexible hydrogen and power production*, Applied Thermal Engineering, 207, 2022, 118218

42. A.M. Cormos, S. Dragan, **C.C. Cormos**, *Integration of membrane technology for decarbonization of gasification power plants: A techno-economic and environmental investigation*, Applied Thermal Engineering, 205, 2022, 118078

43. A. Ugwu, C. Arnaiz del Pozo, A. Zaabout, S. Mohd Nazir, N. Uzun Kalendar, S. Cloete, S. Szima, S. Fogarasi, F. Donat, G. van Diest, J. Hendrik Cloete, Á. Jiménez Álvaro, K. Albertsen, A.M. Cormos, **C.C. Cormos**, S. Amini, *Gas switching technology: Economic attractiveness for chemical looping applications and scale up experience to 50 kWth*, International Journal of Greenhouse Gas Control, 114, 2022, 103593

44. V.C. Sandu, A.M. Cormos, **C.C. Cormos**, *Fuel reactor CFD multiscale modelling in syngas-based chemical looping combustion with ilmenite*, Energies, 14, 2021, 6059

45. M. Alabid, **C.C. Cormos**, C. Dinca, *Critical Assessment of Membrane Technology Integration in a Coal-Fired Power Plant*, Membranes, 12, 2022, 904

46. A. Mio, L. Petrescu, A.V. Luca, S.C. Galusnyak, M. Fermeglia, **C.C. Cormos**, *Carbon Dioxide Capture in the Iron and Steel Industry: Thermodynamic Analysis, Process Simulation, and Life Cycle Assessment*, Chemical and Biochemical Engineering Quarterly, 36, 2022, 255 - 271

47. V.C. Sandu, A.M. Cormos, I.D. Dumbrava, A. Imre-Lucaci, **C.C. Cormos**, R. de Boer, J. Boon, S. Sluijter, *Assessment of CO_2 capture efficiency in packed bed versus 3D-printed monolith reactors for SEWGS using CFD modeling*, International Journal of Greenhouse Gas Control, 111, 2021, 103447

48. S.C. Galusnyak, I.D. Dumbrava, L. Petrescu, S. Dragan, **C.C. Cormos**, *Assessment of CO_2 Utilization Technologies into Valuable C1 Organic Chemicals: a Modelling and Simulation Analysis*, Chemical Engineering Transactions, 94, 2022, 397 - 402

49. **C.C. Cormos**, S. Dragan, A.M. Cormos, L. Petrescu, *Assessment of Flexible Thermochemical Energy Conversion and Storage System based on Chemical Looping Combustion*, Chemical Engineering Transactions, 94, 2022, 25 - 30

50. **C.C. Cormos**, M. Dragan, C. Dinca, A.M. Cormos, S. Dragan, I.D. Dumbrava, F. Ilea, S. Galusnyak, *Economic Assessment of Green Hydrogen Production from Biomass Gasification with Chemical Absorption and Membrane-based CO_2 Capture*, Chemical Engineering Transactions, 94, 2022, 277 - 282

51. **C.C. Cormos**, L. Petrescu, A.M. Cormos, *Integration of thermo-chemical energy storage for flexible operation of decarbonized power plants*, Computer Aided Chemical Engineering, 51, 2022, 631-636

52. V.C. Sandu, A.M. Cormos, **C.C. Cormos**, *Fuel reactor CFD multiscale modelling in syngas-based chemical looping combustion with ilmenite*, Energies, 14, 2021, 6059

53. V.C. Sandu, A.M. Cormos, I.D. Dumbrava, A. Imre-Lucaci, **C.C. Cormos**, R. de Boer, J. Boon, S. Sluijter, *Assessment of CO_2 capture efficiency in packed bed versus 3D-printed monolith reactors for SEWGS using CFD modeling*, International Journal of Greenhouse Gas Control, 111, 2021, 103447

54. S. Szima, C.A. del Pozo, S. Cloete, S. Fogarasi, A.J. Alvaro, A.M. cormos, **C.C. Cormos**, S. Amini, *Techno-economic assessment of IGCC power plants using gas switching technology to minimize the energy penalty of CO_2 capture*, Clean Technologies, 3, 2021, 594-617

55. A.M. Cormos, S. Dragan, **C.C. Cormos**, *Techno-economic and environmental assessment of flexible operation for decarbonized super-critical power plants using reactive gas - liquid absorption*, Applied Thermal Engineering, 197, 2021, 117354

56. **C.C. Cormos**, L. Petrescu, A.M. Cormos, C. Dinca, *Assessment of hybrid solvent - membrane configurations for post-combustion CO_2 capture for super-critical power plants*, Energies, 14 (2021) 5017

57. I.D. Dumbrava, **C.C. Cormos**, A. Imre-Lucaci, A.M. Cormos, *CFD modelling of supercritical water reforming of glycerol for hydrogen production*, International Journal of Hydrogen Energy, 47, 2022, 12147-12158

58. L. Petrescu, S. Burca, M. Fermeglia, A. Mio, **C.C. Cormos**, *Process simulation coupled with LCA for the evaluation of liquid - liquid extraction processes of phenol from aqueous streams*, Journal of Water Process Engineering, 41, 2021, 102077

59. G. Luongo, F. Donat, M. Krödel, **C.C. Cormos**, C.R. Müller, *Experimental data supported techno-economic assessment of the oxidative dehydrogenation of ethane through chemical looping with oxygen uncoupling*, Renewable and Sustainable Energy Reviews, 149, 2021, 111403

60. I.D. Dumbrava, **C.C. Cormos**, *Techno-economical evaluations of decarbonized hydrogen production based on direct biogas conversion using thermo-chemical looping cycles*, International Journal of Hydrogen Energy, 46, 2021, 23149-23163

61. **C.C Cormos**, *Techno-economic assessment of calcium and magnesium-based sorbents for post-combustion CO_2 capture applied in fossil-fueled power plants*, Fuel, 298, 2021, 120794

62. **C.C. Cormos**, C. Dinca, *Techno-economic and environmental implications of decarbonization process applied for Romanian fossil-based power generation sector*, Energy, 220, 2021, 119734

63. S. Szima, **C.C. Cormos**, *CO_2 utilization technologies: A techno-economic analysis for synthetic natural gas production*, Energies, 14(5), 2021, 1258

64. L. Petrescu, C. Dinca, **C.C. Cormos**, *Assessment of flexible carbon capture and utilization options applied to gasification plants*, Studia Universitatis Babes-Bolyai Chemia, 65(4), 2020, 21-34

65. S. Galusnyak, L. Petrescu, **C.C. Cormos**, *Techno-economic and environmental assessment of hydrogen production based on natural gas steam reforming process*, Studia Universitatis Babes-Bolyai Chemia, 65(4), 2020, 7-19

66. A.M. Cormos, I. Dumbrava, **C.C. Cormos**, *Evaluation of techno-economic performance for decarbonized hydrogen and power generation based on glycerol thermo-chemical looping cycles*, Applied Thermal Engineering, 179, 2020, 115728

67. **C.C. Cormos**, *Techno-economic implications of flexible operation for super-critical power plants equipped with calcium looping cycle as a thermo-chemical energy storage system*, Fuel, 280, 2020, 118293

68. D.A. Chisalita, L. Petrescu, **C.C. Cormos**, *Environmental evaluation of european ammonia production considering various hydrogen supply chains*, Renewable and Sustainable Energy Reviews, 130, 2020, 109964

69. **C.C. Cormos**, A.M. Cormos, I. Dumbrava, *Assessment of innovative carbon capture technologies applied for flexible energy vectors poly-generation*, 30-th European Symposium on Computer Aided Process Engineering - ESCAPE30, Milan, Italy, 31 August - 2 Septembrie 2020, published in Computer Aided Chemical Engineering, 48, 2020, 1369-1374

70. L. Petrescu, S.C. Galusnyak, D.A. Chisalita, **C.C. Cormos**, *Modeling and simulation of methanol production and conversion into various chemical intermediates and products*, 30-th European Symposium on Computer Aided Process Engineering - ESCAPE30, Milan, Italy, 31 August - 2 Septembrie 2020, published in Computer Aided Chemical Engineering, 48, 2020, 553-558

71. V.C. Sandu, **C.C. Cormos**, A.M. Cormos, *Dynamic simulation of chemical looping combustion in packed bed reactors*, 30-th European Symposium on Computer Aided Process Engineering - ESCAPE30, Milan, Italy, 31 August - 2 Septembrie 2020, published in Computer Aided Chemical Engineering, 48, 2020, 601-606

72. L. Petrescu, S.C. Galusnyak, D.A. Chisalita, **C.C. Cormos**, *Modelling and simulation of biodiesel production process using innovative technologies*, International Conference on Biomass - ICONBM 2020, Firenze, Italy, 26 - 29 April 2020, published in Chemical Engineering Transaction, 80, 2020, 181-186

73. A.M. Cormos, S. Dragan, L. Petrescu, V.C. Sandu, **C.C. Cormos**, *Technical and environmental evaluations of key decarbonized fossil-intensive industrial processes by reactive absorption & adsorption CO_2 capture systems*, Energies, 13, 2020, 1268

74. A.M. Cormos, V.C. Sandu, **C.C. Cormos**, *Assessment of main energy integration elements for decarbonized gasification plants based on thermo-chemical looping cycles*, Journal of Cleaner Production, 259, 2020, 120834

75. V.C. Sandu, I.D. Dumbrava, A.M. Cormos, A. Imre-Lucaci, **C.C. Cormos**, P. Cobden, R. de Boer, *Modeling of a rectangular channel monolith reactor for sirption-enhanced water-gas shift*, Environmental Engineering and Management Journal, 19, 2020, 2

76. **C.C. Cormos**, *Energy and cost efficient manganese chemical looping air separation cycle for decarbonized power generation based on oxy-fuel combustion and gasification*, Energy, 191, 2020, 116579

77. A.M. Cormos, **C.C. Cormos**, *Techno-economic assessment of combined hydrogen & power co-generation with carbon capture: The case of coal gasification*, Applied Thermal Engineering, 147, 2019, 29-39

78. S. Szima, **C.C. Cormos**, *Techno - economic assessment of flexible decarbonized hydrogen and power co-production based on natural gas dry reforming*, International Journal of Hydrogen Energy, 44, 2019, 31712-31723

79. D.A. Chisalita, **C.C. Cormos**, *Techno-economic assessment of hydrogen production processes based on various natural gas chemical looping systems with carbon capture*, Energy, 181, 2019, 331-344

80. S. Szima, S.M. Nazir, S. Cloete, S. Amini, S. Fogarasi, A.M. Cormos, **C.C. Cormos**, *Gas switching reforming for flexible power and hydrogen production to balance variable renewables*, Renewable and Sustainable Energy Reviews, 110, 2019, 207-219

81. D.A. Chisalita, L. Petrescu, P. Cobden, H.A.J van Dijk, A.M. Cormos, **C.C. Cormos**, *Assessing the environmental impact of an integrated steel mill with post-combustion CO_2 capture and storage using the LCA methodology*, Journal of Cleaner Production, 211, 2019, 1015-1025

82. L. Petrescu, D.A. Chisalita, **C.C. Cormos**, G. Manzolini, P. Cobden, H.A.J. van Dijk, *Life cycle assessment of SEWGS technology applied to integrated steel plants*, Sustainability, 11, 2019, 1825

83. V.C. Sandu, **C.C. Cormos**, A.M. Cormos, *Assessment of various water-gas-shift process configurations applied to partial oxidation energy conversion processes with carbon capture*, Studia Universitatis Babes-Bolyai Chemia, 64, 2019, 371-381

84. **C.C. Cormos**, *Techno-economic evaluations of copper-based chemical looping air separation system for oxy-combustion and gasification power plants with carbon capture*, Energies, 11, 2018, 1-17

85. D.A. Chisalita, L. Petrescu, A.M. Cormos, **C.C. Cormos**, *Assessing energy and CO_2 emission reduction from ammonia production by chemical looping as innovative carbon capture technology*, 28-th European Symposium on Computer Aided Process Engineering - ESCAPE28, Graz, Austria, 10 - 13 June 2018, published in Computer Aided Chemical Engineering, 43, 2018, 1269-1274

86. S. Szima, A.M. Cormos, **C.C. Cormos**, *Flexible hydrogen and power co - generation based on dry methane reforming with carbon capture*, 28-th European Symposium on Computer Aided

Process Engineering - ESCAPE28, Graz, Austria, 10 - 13 June 2018, published in Computer Aided Chemical Engineering, 43, 2018, 1281-1286

87. A.M. Cormos, C. Dinca, L. Petrescu, D. Chisalita, S. Szima, **C.C. Cormos**, *Carbon capture and utilisation technologies applied to energy conversion systems and other energy-intensive industrial applications*, Fuel, 211, 2018 883-890

88. H.A.J. Van Dijk, P. Cobden, L. Lukashuk, L. Van De Water, M. Lundqvist, G. Manzolini, **C.C. Cormos**, C. Van Dijk, L. Mancuso, J. Johns, D. Bellqvist, *Stepwise project: Sorption-enhanced water-gas shift technology to reduce carbon footprint in the iron and steel industry*, Johnson Matthey Technology Review, 62, 2018, 395-402

89. C. Dinca, N. Savu, **C.C. Cormos**, A. Badea, *CO_2 capture from syngas generated by a biomass gasification power plant with chemical absorption process*, Energy, 149, 2018, 925-936

90. S. Szima, **C.C. Cormos**, *Improving methanol synthesis from carbon-free H2 and captured CO_2: A techno-economic and environmental evaluation*, Journal of CO_2 Utilization, 24, 2018, 555-563

91. **C.C. Cormos**, *Assessment of copper-based chemical looping air separation system for energy efficiency improvements of oxy-combustion and gasification power plants*, Applied Thermal Engineering, 130, 2018, 120-126

92. A.M. Cormos, C. Dinca, **C.C. Cormos**, *Energy efficiency improvements of post-combustion CO_2 capture based on reactive gas-liquid absorption applied for super-critical circulating fluidized bed combustion (CFBC) power plants*, Clean Technologies and Environmental Policy, 20, 2018, 1311-1321

93. A.M. Cormos, **C.C. Cormos**, *Techno-economic evaluations of post-combustion CO_2 capture from sub- and super-critical circulated fluidised bed combustion (CFBC) power plants*, Applied Thermal Engineering, 127, 2017, 106-115

94. A.M. Cormos, **C.C. Cormos**, *Reducing the carbon footprint of cement industry by post-combustion CO_2 capture: Techno-economic and environmental assessment of a CCS project in Romania*, Chemical Engineering Research and Design, 123, 2017, 230-239

95. A.M. Cormos, **C.C. Cormos**, *Techno-economic and environmental performances of glycerol reforming for hydrogen and power production with low carbon dioxide emissions*, International Journal of Hydrogen Energy, 42, 2017, 7798-7810

96. C.C. Cormos, C. Dinca, L. Petrescu, A.M. Cormos, *Carbon capture and utilisation technologies applied to energy conversion systems and other energy-intensive applications*, 8th Clean Coal Technologies conference - CCT2017, 8 - 12 May 2017, Cagliari, Sardinia, Italy

97. L. Petrescu, **C.C. Cormos**, *Environmental assessment of IGCC power plants with pre-combustion CO_2 capture by chemical & calcium looping methods*, Journal of Cleaner Production, 158, 2017, 233-244

98. S. Fogarasi, **C.C. Cormos**, *Assessment of coal and sawdust co-firing power generation under oxy-combustion conditions with carbon capture and storage*, Journal of Cleaner Production, 142, 2017, 3527-3535

99. C.C. Cormos, *Chemical Looping with Oxygen Uncoupling (CLOU) concepts for high energy efficient power generation with near total fuel decarbonisation*, Applied Thermal Engineering, 112, 2017, 924-931

100. L. Petrescu, D. Bonalumi, G. Valenti, A.M. Cormos, **C.C. Cormos**, *Life Cycle Assessment for supercritical pulverized coal power plants with post-combustion carbon capture and storage*, Journal of Cleaner Production, 157, 2017, 10-21

101. D.M. Lohan, **C.C. Cormos**, *Evaluation of hydrogen production from catalytic reforming of liquefied petroleum gas with carbon capture and storage*, Studia Universitatis Babes-Bolyai Chemia, 61, 2017, 241-252

102. L. Petrescu, M. Fermeglia, **C.C. Cormos**, *Life Cycle Analysis applied to acrylic acid production process with different fuels for steam generation*, Journal of Cleaner Production, 133, 2016, 294-303

103. **C.C. Cormos**, L. Petrescu, A.M. Cormos, S. Agachi, *Process design and integration of various carbon capture approaches into the energy sector and other energy-intensive industrial applications*, Computer Aided Chemical Engineering, 38, 2016, 265-270

104. **C.C. Cormos**, *Evaluation of reactive absorption and adsorption systems for post-combustion CO_2 capture applied to iron and steel industry*, Applied Thermal Engineering, 105, 2016, 56-64

105. **C.C. Cormos**, *Oxy-combustion of coal, lignite and biomass: A techno-economic analysis for a large scale Carbon Capture and Storage (CCS) project in Romania*, Fuel, 169, 2016, 50-57

106. L. Petrescu, **C.C. Cormos**, *Waste reduction (WAR) algorithm applied for environmental impact assessment of coal gasification with carbon capture and storage*, Journal of Cleaner Production, 104, 2015, 220-235

107. S. Fogarasi, **C.C. Cormos**, *Technico-economic assessment of coal and sawdust co-firing power generation with CO_2 capture*, Journal of Cleaner Production, 103, 2015, 140-148

108. Z. Tasnadi-Asztalos, **C.C. Cormos**, P.S. Agachi, *Hydrogen-based power generation from bioethanol steam reforming*, 10th International Conference Processes in Isotopes and Molecules, Cluj-Napoca, Romania, 23 - 25 September 2015

109. **C.C. Cormos**, A.M. Cormos, *Techno-economic and environmental analysis of oxy-combustion power plants*, 10th European Congress of Chemical Engineering, Nice, France, 27 September - 1 October 2015

110. **C.C. Cormos**, A.M. Cormos, P.S. Agachi, *Evaluation of energy integration aspects for advanced chemical looping systems applied for energy vectors poly-generation*, Computer Aided Chemical Engineering, 37, 2015, 2237-2242

111. **C.C. Cormos**, *Biomass direct chemical looping for hydrogen and power co-production: Process configuration, simulation, thermal integration and techno-economic assessment*, Fuel Processing Technology, 137, 2015, 16 - 23

112. Z. Tasnadi-Asztalos, P.S. Agachi, **C.C. Cormos**, *Evaluation of energy efficient low carbon hydrogen production concepts based on glycerol residues from biodiesel production*, International Journal of Hydrogen Energy, 40, 2015, 7017-7027

113. **C.C. Cormos**, *Assessment of chemical absorption/adsorption for post-combustion CO_2 capture from Natural Gas Combined Cycle (NGCC) power plants*, Applied Thermal Engineering, 82, 2015, 120 - 128

114. A.M. Cormos, C. Dinca, **C.C. Cormos**, *Multi-fuel multi-product operation of IGCC power plants with carbon capture and storage (CCS)*, Applied Thermal Engineering, 74, 2015, 20 - 27

D. Lucrări publicate în ultimii 10 anii în reviste şi volume de conferinţe cu referenţi (neindexate)

E. Brevete obţinute în întreaga activitate

1. L. Terec, G. Bora, V. Colceriu, **C.C. Cormos**, E. Cotora, L. Lenta, M. Moga, H. Muresanu, M. Racolta, *Procedeu de purificare a 1,4 - benzochinon - guanil - hidrazon - tiosemicarbazona (ambazonă)*, WO/2005/028431 (număr brevet în Romania: RO122360), Aplicant: S.C. Terapia S.A., Cluj-Napoca, Romania

Data: **Semnătura:**

01.07.2025

A N E X A 4 . 1

Nume Prenume: **Sălăgean Grigore-Ștefan**
Gradul didactic: Profesor

Instituția unde este titular: fost titular la UBB, acum pensionar

Facultatea: Matematică și Informatică
Departamentul: Matematică

L I S T A
lucrărilor ştiinţifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

Probleme extremale în teoria geometrică a funcțiilor analitice, 1982, conducător științific prof. dr. Petru T. Mocanu, membru al Academiei Române

B. Cărţi și capitole în cărţi publicate în ultimii 10 ani

1. *Analiză complexă*, curs, format electronic (este pe Teams)
2. *Gheorghe Călugăreanu şi Petru T. Mocanu. Scoala clujeană de Teoria Funcţiilor*, capitol in *Pagini din istoria matematicii romanes*ti, Coordonatori V. Barbu, G. Marinoschi, I. Tomescu, Editura Academiei Române (2018), 248-255

C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani

1. Srivastava, H.M.; El-Deeb, S.M.; Breaz, D.; Cotirlă, L.-I.; **Sălăgean, G.S.**, Bi-Concave Functions Connected with the Combination of the Binomial Series and the Confluent Hypergeometric Function. Symmetry, 2024, 16, 226. https://doi.org/10.3390/sym16020226 (Scopus) BDI
2. Wanas Abbas Kareem, **Salagean Grigore Stefan**, Pall-Szabo Agnes, Coefficient Bounds and Fekete-Szego inequality for a Certain Family of Holomorphic and Bi-Univalent Functions Defined by (M,N)-Lucas Polynomials, Filomat, 37 Nr. 4 (2023), 1037-1044, ISI
3. **G. S. Sălăgean**, Á.O. Páll-Szabó, On the order of convolution consistence of certain classes of harmonic functions with varying arguments. Studia Univ. Babes-Bolyai, Math., 2023, Vol. 68 Issue 2, p269-278. 10p ISI
4. Kohr, M; **Salagean G.S**.. Professor GABRIELA KOHR - A life for research. In memoriam. Studia UBB, Mathematica, 2022, vol. 67, issue 2, p. 205-218 ISI
5. **Grigore Stefan Sălăgean**, Agnes Orsolya Páll-Szabó, On a certain class of harmonic functions and the generalized Bernardi-Libera-Livingston integral operator, Studia Univ. Babeș-Bolyai Math. 65(2020), No. 3, 365–371 ISI

6. Pall-Szabo Agnes Orsolya, **G. S. Salagean**, A Unified Class of Harmonic Functions with Varying Argument of Coefficients, Filomat, 32 Nr. 4 (2018), 1349-1357. https://doi.org/10.2298/FIL1804349S ISI
7. **G. S. Sălăgean**, L.-I. Cotîrlă, New classes of harmonic univalent functions, Acta Univ. Apulensis Math. Inform. No. 56 (2018), 101–110. MR3898877 BDI
8. Ventel Adela, **G. S. Sălăgean**, On the order of convolution consistence of the analytic functions with negative coefficients, Mathematica Bohemica 142 , no. 4 (2017), 381-386. DOI: 10.21136/MB.2017.0019-15 BDI
9. Poonam Sharma, R. K. Raina, G. S. **Sălăgean**, Some Geometric Properties of Analytic Functions Involving a New Fractional Operator, Mediterranean Journal of Mathematics, 13 , Nr. 6 (2016), 4591-4605 ISI
10. R. K. Raina, Poonam Sharma and **G. S. Sălăgean**, Some characteristic properties of analytic functions, An. St. Univ. "Ovidius" Constanţa, Seria Mat. 24 (1) 2016, 252-369 ISI

D. Lucrări publicate în ultimii 10 anii în reviste şi volume de conferinţe cu referenţi (neindexate)

- Reviste

1.

- Selecţie cu maximum 20 lucrări în volume de conferinţe

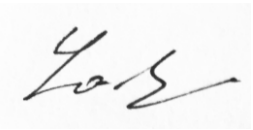
1.

E. Brevete obţinute în întreaga activitate

1.

Data:
01.07.2025

Semnătura:



A N E X A 4 . 1

Nume Prenume: **Adina Letitia Negrusa**
Gradul didactic: Profesor
Instituția unde este titular: Universitatea „Babeș-Bolyai” Cluj-Napoca
Facultatea: Facultatea de Business
Departamentul: Servicii de Ospitalitate

L I S T A
lucrărilor ştiinţifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

Analiza retrospectiva si prospectiva a stilului, filosofiei si bazelor culturale ale managementului japonez

B. Cărţi si capitole în cărţi publicate în ultimii 10 ani

1. Negrusa, Adina Letitia, Valentin Toader, and Joanna Sadkowska. 2019. “Study of Connection between the Obstacles Perceived and Entrepreneurial Attitude of Students from Transylvania.” In ISEG: Proceedings of the 3rd International Conference “Inclusive and Sustainable Economic Growth. Challenges, Measures and Solutions”: Brasov, Romania, 31 May-1 June 2019, 178–83. Bologna: Filodiritto.
2. Negruşa, A. L., & Coroş, M. M. (Eds.). (2023). Remodelling Businesses for Sustainable Development: 2nd International Conference on Modern Trends in Business, Hospitality, and Tourism, Cluj-Napoca, Romania, 2022. ISBN 978-3-031-19655-3, Springer Cham 2023
3. Adina Letiția Negruşa, Ioan Cristian Chifu, Oana Ruxandra Bode, Exploring Relevant Factors Influencing Guests' Satisfaction: Case Study-4 in Remodelling Businesses for Sustainable Development: 2nd International Conference on Modern Trends in Business, Hospitality, and Tourism, Cluj-Napoca, Romania, 2022, Springer Proceedings in Business and Economics, Springer Cham 2023
4. Negruşa, A. L., & Coroş, M. M. (Eds.). (2024). Sustainable Approaches and Business Challenges in Times of Crisis: Springer Proceedings in Business and Economics, ISBN 978-3-031-48287-8 Springer Cham 2024.
5. Negruşa, A. L., Coroş, M. M., & Camilleri, M. A.. Sustainable and Resilient Businesses in the Global Economy. Springer Proceedings in Business and Economics, ISBN 978-3-031-75882-9 Springer Cham, 2025.

C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani

1. Petrescu-Mag, R. M., Petrescu, D. C., Ajtai, I., Roba, C. A., Gica, O. A., Cuibus, L., . Negrụ sa Adina Letitia.. & Bican-Brișan, N. Causes and solutions for fruit and vegetable waste: a participatory approach with Romanian farmers for sustainable agriculture. International Journal of Agricultural Sustainability, 22(1), 2329391. (2024). https://doi.org/10.1080/14735903.2024.2329391

2. Negruşa, A. L. (2024). A REVIEW OF GENERATIONS X AND Y'WORK VALUES AND ATTITUDES ACROSS NORTH AMERICA AND EUROPE. Studia Universitatis Babes Bolyai-Negotia, 69(1), 39-54.

3. Negrusa, A. L., & Butoi, E. (2022). The Work-Life Balance And Well-Being Of Romanian Teleworkers During Pandemic. JOURNAL STUDIA UNIVERSITATIS BABES-BOLYAI NEGOTIA.

4. Negruşa, A. L., & Butoi, E. (2022). Approaching telework system by Romanian employees in the Pandemic Crisis. Ecoforum Journal, 11(1).

5. Negrusa, A. L., & Horea, Cristiana (2020). The impact of students' international mobility on global citizenship identity development-a theoretical approach. Studia UBB Negotia, 65(1), 7-25.

6. Negruşa Adina Letiţia, Starcu Iulia Maria, Strategic Features of the SMEs' innovation process: The case of food services from the Cluj-Napoca market, Studia Universitatis Babes-Bolyai. Negotia, indexată in EBSCO,RePec, Cabells, ProQuest, ISSN: 1224-8738, vol 3, 2017, pp.5-24, https://ideas.repec.org/a/bbn/journl/2017_3_1_negrusa.html .

Data: 01/07/2025 **Semnătura:**

A N E X A 4 . 8

Nume Prenume: Tosa Monica-Ioana
Gradul didactic: Profesor

Instituția unde este titular: Universitatea Babeș-Bolyai

Facultatea: Facultatea de Chimie si Inginerie Chimica
Departamentul: de Chimie

L I S T A
lucrărilor ştiinţifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat Doctorat in Chimie "STEREOSELECTIVE SYNTHESIS IN THE PHENOTHIAZINE SERIE"

B. Cărţi si capitole în cărţi publicate în ultimii 10 ani

1. 2 capitole carte

TORK SOUAD , FILIP ALINA), BENCZE LASZLO-CSABA, NAGY EMMA - ZSÓFIA - ALETTA, TOSA MONICA, PAIZS CSABA, POPPE LASZLO 5. Other Carbon–Nitrogen Bond-Forming Biotransformations- 5.5 Production of L- and D- phenylalanine analogues using tailored phenylalanine ammonia-lyases, Titlu volum: Applied Biocatalysis: The Chemist's Enzyme Toolbox, ISBN volum: 978-1-119-48701-2, Editura: John Wiley & Sons, Inc., Editor: John Whittal, Peter W. Sutton , An: 2020, Numar pagini: 7, Pagina inceput: 215, Pagina sfarsit: 221, Indexat in WoS - Book Citation Index.

IRIMIE FLORIN-DAN, PAIZS CSABA, TOSA MONICA-IOANA, BENCZE LASZLO-CSABA Titlu : Biodiesel, a Green Fuel Obtained Through Enzymatic Catalysis, Titlu volum: BIOMASS AS RENEWABLE RAW MATERIAL TO OBTAIN BIOPRODUCTS OF HIGH-TECH VALUE, ISBN volum: 978-0-444-63774-1, Editura: Elsevier Inc., Tip editura: din străinătate recunoscute, Editor: VALENTIN POPA, IRINA VOLF, An: 2018, Numar pagini: 44, Pagina inceput: 191, Pagina sfarsit: 234, Indexat in WoS - Book Citation Index.

C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani

1. 46 lucrari indexate ISI/BDI (Document justificativ- Tosa)

Lista Autori	Titlu	Titlu Revistă	An	Volum Nr	Pagina
TOSA MONICA-IOANA, IRIMIE FLORIN-DAN, PAIZS CSABA, BREM JURGEN, Nagy Botond, Dima Norbert-Artur,	New chemo-enzymatic approaches for the synthesis of (R)- and (S)-bufuralol	TETRAHEDRON-ASYMMETRY	2014	25	1 - 8
TOSA MONICA-IOANA, IRIMIE FLORIN-DAN, MANTU Alexandra, Dima Norbert-Artur, Zaharia Valentin, MOISĂ MĂDĂLINA - ELENA,	Candida antarctica lipases acting as versatile catalysts for the synthesisof enantiopure (R)- and (S)-1-(2-phenylthiazol-4-yl)ethanamines	JOURNAL OF MOLECULAR CATALYSIS B-ENZYMATIC	2014	107	114 - 119
TOSA MONICA-IOANA, Komjáti Balázs,	STABLE HYDRATE OF A β-	STUDIA	2015	50	229 -

Poppe Laszlo, Nagy József, Madarász János, Kolonits P,	LACTAMCARBALDEHYDE	UNIVERSITATIS BABES-BOLYAI CHEMIA			238
TOSA MONICA-IOANA, BENCZE LASZLO-CSABA, IRIMIE FLORIN-DAN, PAIZS CSABA, Poppe Laszlo, Komjáti Balázs, Nagy József, Pop Laura Ancuta,	Synthesis of enantiopure L-(5-phenylfuran-2-yl)alanines by a sequential multienzyme process	TETRAHEDRON-ASYMMETRY	2015	26(18-19)	1095 - 1101
PAIZS CSABA, IRIMIE FLORIN-DAN, TOSA MONICA-IOANA, BARTHA-VARI JUDITH - HAJNAL, Poppe Laszlo, Vertessy Beata, Weiser Diana, Boros Zoltan,	Immobilization of phenylalanine ammonia-lyase on single-walled carbon nanotubes for stereoselective biotransformations in batch and in continuous-flow modes	CHEMCATCHEM	2015	7	1022 - 1028
TOSA MONICA-IOANA, Dulf Francisc, Dulf Eva, Vodnar Dan Cristian,	Total Phenolic Contents, Antioxidant Activities and Lipid Fractions from Berry Pomaces Obtained by Solid-State Fermentation of two Sambucus Species with Aspergillus Niger	JOURNAL OF AGRICULTURAL AND FOOD CHEMISTRY	2015	63	3489 - 3500
PAIZS CSABA, BENCZE LASZLO-CSABA, IRIMIE FLORIN-DAN, TOSA MONICA-IOANA, Nagy Botond, VARGA ANDREA, Gellert Akos, Banoczi Gergely, Poppe Laszlo, Retey Janos,	Influence of the aromatic moiety in α- and β-arylalanines on their biotransformation with phenylalanine 2,3-aminomutase from Pantoea agglomerans.	RSC ADVANCES	2016	6	56412 - 56420
TOSA MONICA-IOANA, BENCZE LASZLO-CSABA, FILIP ALINA, MOISĂ MĂDĂLINA - ELENA, Nagy Botond,	Lipase catalyzed parallel kinetic resolution of ibuprofen	STUDIA UNIVERSITATIS BABES-BOLYAI CHEMIA	2016	61(4)	255 - 266
BENCZE LASZLO-CSABA, BARTHA-VARI JUDITH - HAJNAL, KATONA GABRIEL, TOSA MONICA-IOANA, PAIZS CSABA, IRIMIE FLORIN-DAN,	Nanobioconjugates of Candida antarctica lipase B and single-walled carbon nanotubes in biodiesel production	BIORESOURCE TECHNOLOGY	2016	200	853 - 860
TOSA MONICA-IOANA, IRIMIE FLORIN-DAN, BENCZE LASZLO-CSABA, PAIZS CSABA, Hapau Denisa, Zaharia Valentin,	Heterocycles 36. Single-Walled Carbon Nanotubes-Bound N, N-Diethyl Ethanolamine as Mild and Efficient Racemisation Agent in the Enzymatic DKR of 2-Arylthiazol-4-yl-alanines	MOLECULES	2016	21	25 - 49
TOSA MONICA-IOANA, PAIZS CSABA, BENCZE LASZLO-CSABA, IRIMIE FLORIN-DAN, BARTHA-VARI JUDITH - HAJNAL, KATONA GABRIEL, Poppe Laszlo, Bell Evelin,	Aminated single-walled carbon nanotubes as carrier for covalent immobilization of phenylalanine ammonia-lyase	PERIODICA POLYTECHNICA-CHEMICAL ENGINEERING	2017	61(1)	59 - 66
TOTOS ROBERT, PAIZS CSABA, IRIMIE FLORIN-DAN, TOSA MONICA-IOANA, BENCZE LASZLO-CSABA, Balazsi Jozsef,	VALIDATED LC-MS/MS METHOD FOR THE CONCOMITANT DETERMINATION OF AMOXICILLIN AND CLAVULANIC ACID FROM HUMAN PLASMA	STUDIA UNIVERSITATIS BABES-BOLYAI CHEMIA	2017	62	167 - 178
FILIP ALINA, **PAIZS CSABA,** IRIMIE FLORIN-DAN, BENCZE LASZLO-CSABA, TOSA MONICA-IOANA, Banoczi Gergely, Gellert Akos, Poppe Laszlo,	Expanding the substrate scope of phenylalanine ammonia-lyase from Petroselinum crispum towards styrylalanines	ORGANIC & BIOMOLECULAR CHEMISTRY	2017	15	3717 - 3727
TOSA MONICA-IOANA, PAIZS CSABA, BENCZE LASZLO-CSABA, Nagy Botond, Forro Eniko, Fulop Ferenc, Galla Zsolt,	Covalently Immobilized Lipases are Efficient Stereoselective Catalysts for the Kinetic Resolution of rac-(5-Phenylfuran-2-yl)- beta-alanine Ethyl Ester Hydrochlorides	EUROPEAN JOURNAL OF ORGANIC CHEMISTRY	2017	2017	2878 - 2882
TOSA MONICA-IOANA, Dulf Francisc, Vodnar Dan Cristian,	Exploitation of Agro-Industrial By-Products as Substrate for Solid-State Fermentation	Bulletin USAMV series Agriculture	2014		200 - 204
MOISĂ MĂDĂLINA - ELENA, Spelmezan Cristina Georgiana, Paul Cristina , BARTHA-VARI JUDITH - HAJNAL, BENCZE LASZLO-CSABA, IRIMIE FLORIN-DAN, PAIZS CSABA, Peter Francisc, **TOSA MONICA-IOANA,**	Tailored sol–gel immobilized lipase preparates for the enzymatic kinetic resolution of heteroaromatic alcohols in batch and continuous flow systems	RSC ADVANCES	2017	7	52977 - 52987
LĂCĂTUȘ MIHAI - ANDREI, BENCZE LASZLO-CSABA, TOSA MONICA-IOANA, PAIZS CSABA, **IRIMIE FLORIN-DAN,**	Eco-Friendly Enzymatic Production of 2,5-Bis(hydroxymethyl)furan Fatty Acid Diesters, Potential Biodiesel Additives	ACS Sustainable Chemistry & Engineering	2018	6, 9	11353 - 11359
FILIP ALINA, **BENCZE LASZLO-CSABA, PAIZS CSABA, Poppe Laszlo,** IRIMIE FLORIN-DAN, TOSA MONICA-IOANA, Banoczi Gergely, TORK SOUAD - DIANA, NAGY EMMA - ZSÓFIA - ALETTA,	Tailored Mutants of Phenylalanine Ammonia-Lyase from Petroselinum crispum for the Synthesis of Bulky L- and D-Arylalanines	ChemCatChem	2018	10, 12	2627 - 2633
TOSA MONICA-IOANA, IRIMIE FLORIN-DAN, Moosmann Berndt, Hajieva Parvana, Granold Matthias,	Modern diversification of the amino acid repertoire driven by oxygen	PROCEEDINGS OF THE NATIONAL ACADEMY OF	2018	115(1)	41 - 46

		SCIENCES OF THE UNITED STATES OF AMERICA			
Balazsi Jozsef, IRIMIE FLORIN-DAN, PAIZS CSABA, TOSA MONICA-IOANA, BENCZE LASZLO-CSABA, **Totos Robert,**	Validated LC-MS/MS method for the concomitant determination of amoxicillin and clavulanic acid from human plasma	Studia Universitatis Babes-Bolyai Chemia	2018	62, 2	167 - 178
TOSA MONICA-IOANA, MOISĂ MĂDĂLINA - ELENA, BENCZE LASZLO-CSABA, PAIZS CSABA, IRIMIE FLORIN-DAN, Poppe Laszlo, Barabas Laura Edit, Peter Francisc,	Click reaction-aided enzymatic kinetic resolution of secondary alcohols†	Reaction Chemistry & Engineering	2018	5	790 - 798
NAGY EMMA - ZSÓFIA - ALETTA, TORK SOUAD - DIANA, FILIP ALINA, Lang Pauline A., IRIMIE FLORIN-DAN, Poppe Laszlo, TOSA MONICA-IOANA, Schofield Cristopher J., Brem Jurgen, **PAIZS CSABA, BENCZE LASZLO-CSABA,**	Mapping the Hydrophobic Substrate Binding Site of Phenylalanine Ammonia-Lyase from Petroselinum crispum	ACS Catalysis	2019	9	8825 - 8834
BENCZE LASZLO-CSABA, TORK SOUAD - DIANA, NAGY EMMA - ZSÓFIA - ALETTA, Cserepes Lilla, Bordea Diana Monica, Nagy Botond, TOSA MONICA-IOANA, PAIZS CSABA,	The production of L- and D-phenylalanines using engineered phenylalanine ammonia lyases from Petroselinum crispum	Scientific Reports	2019	9	1 - 11
TOSA MONICA-IOANA, PAIZS CSABA, BENCZE LASZLO-CSABA, MOISĂ MĂDĂLINA - ELENA,	Continuous-flow enzymatic kinetic resolution mediated by a lipase nanobioconjugate	Studia Universitatis Babes-Bolyai Chemia	2019	64, 2	79 - 86
TOSA MONICA-IOANA, Poppe Laszlo, **PAIZS CSABA,**	This issue of our journal is dedicated to Professor Florin Dan Irimie on His 65th Anniversary	Studia Universitatis Babes-Bolyai Chemia	2019	64	7 - 9
LĂCĂTUȘ MIHAI - ANDREI, DUDU ADRIAN - IOAN, BENCZE LASZLO-CSABA, KATONA GABRIEL, IRIMIE FLORIN-DAN, PAIZS CSABA, **TOSA MONICA-IOANA,**	Solvent-Free Biocatalytic Synthesis of 2,5-bis-(Hydroxymethyl)Furan Fatty Acid Diesters from Renewable Resources	ACS SUSTAINABLE CHEMISTRY & ENGINEERING	2020	8	1611 - 1617
TOSA MONICA-IOANA, Dulf Francisc, Dulf Eva, Vodnar Dan Cristian,	Simultaneous enrichment of grape pomace with γ-linolenic acid and carotenoids by solid-state fermentation with Zygomycetes fungi and antioxidant potential of the bioprocessed substrates	FOOD CHEMISTRY	2020	310	125927 - 125936
TOSA MONICA-IOANA, SPELMEZAN CRISTINA - GEORGIANA, BENCZE LASZLO-CSABA, KATONA GABRIEL, IRIMIE FLORIN-DAN, PAIZS CSABA,	Efficient and Stable Magnetic Chitosan-Lipase B from Candida Antarctica Bioconjugates in the Enzymatic Kinetic Resolution of Racemic Heteroarylethanols	MOLECULES	2020	25	1 - 15
TOSA MONICA-IOANA, BARTHA-VARI JUDITH - HAJNAL, MOISĂ MĂDĂLINA - ELENA, BENCZE LASZLO-CSABA, PAIZS CSABA, IRIMIE FLORIN-DAN,	Efficient Biodiesel Production Catalyzed by Nanobioconjugate of Lipase from Pseudomonas fluorescens	MOLECULES	2020	25	651 - 662
MOISĂ MĂDĂLINA - ELENA, Amariei Diana, NAGY EMMA - ZSÓFIA - ALETTA, Szarvas Nora, TOSA MONICA-IOANA, PAIZS CSABA, **BENCZE LASZLO-CSABA,**	Fluorescent enzyme-coupled activity assay for phenylalanine ammonia-lyases	SCIENTIFIC REPORTS	2020	10	18418 - 18428
TOSA MONICA-IOANA, DUDU ADRIAN - IOAN, LĂCĂTUȘ MIHAI - ANDREI, BENCZE LASZLO-CSABA, PAIZS CSABA,	Green Process for the Enzymatic Synthesis of Aroma Compounds Mediated by Lipases Entrapped in Tailored Sol−Gel Matrices	ACS SUSTAINABLE CHEMISTRY & ENGINEERING	2021	9	5461 - 5469
BOROS KRISZTINA, MOISĂ MĂDĂLINA - ELENA, NAGY LEVENTE CSABA, PAIZS CSABA, TOSA MONICA-IOANA, **BENCZE LASZLO-CSABA,**	Robust, site-specifically immobilized phenylalanine ammonia-lyases for the enantioselective ammonia addition of cinnamic acids	CATALYSIS SCIENCE & TECHNOLOGY	2021	11	5553 - 5563
VARGA ANDREA, Csuka Pal, Banoczi Gergely, Molnar Zsofia, TOSA MONICA-IOANA, KATONA GABRIEL, **BENCZE LASZLO-CSABA, PAIZS CSABA, Poppe Laszlo,** Sonesouphap Orlavanah,	A novel phenylalanine ammonia-lyase from Pseudozyma antarctica for stereoselective biotransformations of unnatural amino acids	CATALYSIS TODAY	2021		-
MARINCAȘ LAURA, TURDEAN GRAZIELLA-LIANA, Bela Kovacs, TOSA MONICA-IOANA, **BARABAS REKA, FARKAS NOÉMI-IZABELLA,** BIZO LILIANA-ANTONELA,	Hydroxyapatite and Silicon-Modified Hydroxyapatite as Drug Carriers for 4-Aminopyridine	CRYSTALS	2021	11, 1124	-
TOSA MONICA-IOANA, GAL CRISTIAN ANDREI, BARTHA-VARI JUDITH -	Lipase on carbon nanotubes – an active, selective, stable and easy-to-optimize	REACTION CHEMISTRY &	2021	6	2391 - 2399

HAJNAL, MOISĂ MĂDĂLINA - ELENA, BENCZE LASZLO-CSABA, PAIZS CSABA, POPPE LASZLO,	nanobiocatalyst for kinetic resolutions	ENGINEERING			
FARKAS NOÉMI-IZABELLA, MARINCAŞ LAURA, **BARABAS REKA, BIZO LILIANA-ANTONELA,** Ilea Aranka, TURDEAN GRAZIELLA-LIANA, TOSA MONICA-IOANA, Cadar Oana, BARBU-TUDORAN LUCIAN,	Preparation and Characterization of Doxycycline-Loaded Electrospun PLA/HAP Nanofibers as a Drug Delivery System	MATERIALS	2022	15(6)	1 - 16
GAL CRISTIAN ANDREI, BARABÁS LAURA-EDIT, VARGA ANDREA, Csuka Pal, BENCZE LASZLO-CSABA, TOSA MONICA-IOANA, **POPPE LASZLO, PAIZS CSABA,**	How to identify and characterize novel transaminases? Two novel transaminases with opposite enantioselectivity for the synthesis of optically active amines	MOLECULAR CATALYSIS	2022	531, 112660	-
TOSA MONICA-IOANA, DUDU ADRIAN - IOAN, BENCZE LASZLO-CSABA, PAIZS CSABA,	Deep eutectic solvents – a new additive in the encapsulation of lipase B from Candida antarctica: biocatalytic applications	REACTION CHEMISTRY & ENGINEERING	2022	7	442 - 449
TOSA MONICA-IOANA, MARINCAŞ LAURA, BARABAS REKA, FARKAS NOÉMI-IZABELLA, BARBU-TUDORAN LUCIAN,	Deep eutectic solvent PCL-based nanofibers as drug delivery system	MATERIALS CHEMISTRY AND PHYSICS	2023		1 - 10
TOSA MONICA-IOANA, PAIZS CSABA, KATONA GABRIEL, BENCZE LASZLO-CSABA, SPELMEZAN CRISTINA - GEORGIANA,	A robust and efficient lipase based nanobiocatalyst for phenothiazinyl-ethanol resolution	REACTION CHEMISTRY & ENGINEERING	2023	8	1109 - 1116

Lista Autori	Titlu	Pagina Inceput	Pagina Sfarsit	An	Conferință
TOSA MONICA-IOANA, IRIMIE FLORIN-DAN, BENCZE LASZLO-CSABA, PAIZS CSABA, FILIP ALINA,	Synthesis of new substrates for phenylalanine ammonia-lyase	19	19	2014	2nd International Conference on Chemical Engineering ICCE 2014
TOSA MONICA-IOANA, Vodnar Dan Cristian, Dulf Francisc,	EXPLOITATION OF AGRO-INDUSTRIAL BY-PRODUCTS AS SUBSTRATE FOR SOLID-STATE FERMENTATION	155	155	2014	THE 13th INTERNATIONAL SYMPOSIUM "PROSPECTS FOR THE 3rd MILLENNIUM AGRICULTURE"
TOSA MONICA-IOANA, IRIMIE FLORIN-DAN, PAIZS CSABA, MOISĂ MĂDĂLINA - ELENA,	CaL-A-mediated synthesis of benzofuranyl-β-amino acid derivatives	18	18	2014	2nd International Conference on Chemical Engineering ICCE 2014
TOSA MONICA-IOANA, PAIZS CSABA, IRIMIE FLORIN-DAN, MANTU Alexandra, VARGA ANDREA,	PAL and PAM, new promising biocatalysts for amino acids synthesis	16	16	2014	2nd International Conference on Chemical Engineering ICCE 2014
TOSA MONICA-IOANA, IRIMIE FLORIN-DAN, PAIZS CSABA, Dima Norbert-Artur, Nagy Botond,	New chemo-enzymatic approaches for the synthesis of (R)- and (S)-bufuralol	17	17	2014	2nd International Conference on Chemical Engineering ICCE 2014
TOSA MONICA-IOANA, IRIMIE FLORIN-DAN, PAIZS CSABA, Moisa Madalina Elena,	Stereoselective Enzymatic Synthesis of β-Amino Acid Derivatives	33	33	2014	14th International Symposium and Summer School on Bioanalysis
TOSA MONICA-IOANA, IRIMIE FLORIN-DAN, PAIZS CSABA,	Enzymatic Chiral Resolutions and Chromatographic Monitoring - New Insights	26	26	2014	14th International Symposium and Summer School on Bioanalysi
TOSA MONICA-IOANA, PAIZS CSABA, Dima Norbert-Artur, FILIP ALINA,	IsySyCat (International Symposium on Synthesis and Catalysis)	122	122	2015	PcPAL's biocatalytic activity on benzofuran-2-yl-alanines, EVora, Portugalia

TOSA MONICA-IOANA, IRIMIE FLORIN-DAN, PAIZS CSABA, MOISĂ MĂDĂLINA - ELENA, Peter Francisc,	Activity and Stereoselectivity Studies of Some Novel Immobilized Lipases Preparations on Heteroaromatic Ethanols and β-Hydroxy Esters	123	123	2015	ECCE NICE 2015, 10th European Congress of Chemical Engineering
TOSA MONICA-IOANA, IRIMIE FLORIN-DAN, PAIZS CSABA, NAGHI Mara-Ana,	Medium engineering in the enzymatic kinetic resolutions mediated by lipases	31	31	2015	15th International Symposium and Summer School on Bioanalysis
TOSA MONICA-IOANA, BENCZE LASZLO-CSABA, IRIMIE FLORIN-DAN, PAIZS CSABA, BARTHA-VARI JUDITH - HAJNAL, Poppe Laszlo, Barabas Laura Edit, Nagy Emma Zsofia, Abahaziova Emese,	CaL-B Immobilized on Single Walled Carbon Nanotubes as Efficient Biocatalyst for the Kinetic Resolution of 1-(Hetero)aryl – Ethanols	17	17	2016	Biocatalysis COST Training School, Siena, Italy
TOSA MONICA-IOANA, PAIZS CSABA, KATONA GABRIEL, BENCZE LASZLO-CSABA, BARTHA-VARI JUDITH - HAJNAL, Barabas Laura Edit, Nagy Emma Zsofia, Tiponut Norbert,	A CaL-B lipáz nanorészecskékre való rögzítése valamint alkalmazása optikailag tiszta aril, heteroaril szekunder alkoholok előállítására	221	222	2016	, 22ndInternational Conference on Chemistry, 3-6 November 2016, Timisoara, Romania
TOSA MONICA-IOANA, IRIMIE FLORIN-DAN, PAIZS CSABA, MOISĂ MĂDĂLINA - ELENA, Poppe Laszlo,	Click Reactions for Efficient Enzymatic Kinetic Resolution Processing	22	22	2016	3Ird Symposium „Biotransformations 2016”, Warsaw, Poland
TOSA MONICA-IOANA, PAIZS CSABA, IRIMIE FLORIN-DAN, MOISĂ MĂDĂLINA - ELENA, Poppe Laszlo,	Click Reaction Strategy Applied in the Enzymatic Kinetic Resolution Processes	17	17	2016	Systems Biocatalysis” COST Training School, Siena, Italy,
TOSA MONICA-IOANA, IRIMIE FLORIN-DAN, PAIZS CSABA, MOISĂ MĂDĂLINA - ELENA, Hornyanszky Gabor,	Click chemistry – an efficient tool in biocatalysis	14	14	2016	Young Researchers’International Conference on Chemistry and Chemical Engineering (YRICCCE I), Cluj-Napoca, Romania,
TOSA MONICA-IOANA, IRIMIE FLORIN-DAN, PAIZS CSABA, MOISĂ MĂDĂLINA - ELENA, Peter Francisc,	Studii de activitate, selectivitate şi stabilitate ale unor preparate noi de lipaze imobilizate pentru ekr a unor etanoli heteroaromatici	11	11	2015	QUALITY AND EXCELLENCE IN DOCTORAL RESEARCH
TOSA MONICA-IOANA,	Click Reactions for Efficient Enzymatic Kinetic Resolution Processing	77	78	2016	3rd Symposium „Biotransformations 2016"
TOSA MONICA-IOANA,	Click Reaction Strategy for the Efficient Separation of EKR Products	43	43	2017	Biotrans 2017
TOSA MONICA-IOANA,	Nanobioconjugates of Candida antarctica lipase B and single-walled carbon nanotubes as biocatalyst in biodiesel production	42	42	2017	Biotrans 2017

TOSA MONICA-IOANA,	A ECO-FRIENDLY ENZYMATIC APPROACH FOR THE PRODUCTION OF 25-BIS-(HYDROXYMETHYL)FURAN FATTY ACID ESTERS	25	25	2017	Young Researchers in Sciences Conference

D. Lucrări publicate în ultimii 10 anii în reviste şi volume de conferinţe cu referenţi (neindexate)

- Reviste

1. - lucrari in rev. si vol. conf: - 25 lucrari

- Selecţie cu maximum 20 lucrări în volume de conferinţe (Document justificativ - Tosa)

1.

E. Brevete obţinute în întreaga activitate

1.

Nota: Datele sunt preluate din Baza de date Managementul Cercetarii si prezentate in extenso in Anexa Indicatori de calitate pe 10 ani.

Data: **Semnătura:**

01.07.2025

A N E X A 4 . 1

Nume Prenume: **TURDEAN Graziella Liana**
Gradul didactic: profesor
Instituția unde este titular: Universitatea Babes-Bolyai
Facultatea: de Chimie si Inginerie Chimica
Departamentul: de Inginerie Chimica

L I S T A
lucrărilor ştiinţifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

1. Biosenzor amperometric pentru studiul inhibării colinesterazei,
University „Babeş-Bolyai", specialisation „Physical Chemistry", Cluj-Napoca, **1997**,
Supervisor: prof. dr. doc. Liviu Oniciu.
1. „Biocapteur à acetylcholinestérase pour l'étude de l'inhibition des cholinestérases,
Université Paris XII, specialisation „Sciences et Techniques de l'Environnement",
qualification "*tres honorable",* Paris, **1997**,
Supervisor: prof. dr. Daniel R. Thévenot.
Thesis published at *Atelier national de réproductions des thèses*, Grenoble, 1998,
microfilm no: 97/PA12/0107.

B. Cărţi si capitole în cărţi publicate în ultimii 10 ani

1. Nu este cazul

C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani

1. 1. Hidalgo J., **Turdean G. L.** ✉**,** Vilasó-Cadre J. E., Galambos I., Reyes-Domínguez I. A., Hidalgo L., Ignat N., Llanos-Lizcano R., *An optimized chemically modified electrode based on copper oxide nanorods for the quantification of chemical oxygen demand in wastewater*, Inorganic Chemistry Communications, **2025**, 179, 114848, https://doi.org/10.1016/j.inoche.2025.114848
2. Abduakhytova D., Abdimomyn S., Atchabarova A., Mirzaeian M., Tokpayev R., Mukanov A., **Turdean G. L.**, Malchik F., Nauryzbayev M., Controlled electrochemical design of activated carbon surface chemistry: *Enhanced copper recovery using functionalized walnut shell-derived sorbents*, Journal of Water Process Engineering, **2025**, 76, 108066, https://doi.org/10.1016/j.jwpe.2025.108066.
3. Sălăgean C. A., Coteț L. C., Baia M., Fort C. I., Turdean G. L., Barbu-Tudoran L., Lazar M. D., Baia L., *Influence of Precursors on Physical Characteristics of MoS2 and Their Correlation with Potential Electrochemical Applications*, Materials **2025**, 18, Issue 9, 2111, https://doi.org/10.3390/ma18092111

4. Vilasó-Cadre, Javier E., Hidalgo J., Arada-Pérez M. A., Reyes-Domínguez I. A., **Turdean G. L.** ✉**,** Cruz R., Piña Leyte-Vidal J. J., González-Fernández L. A., Sánchez-Polo M., Hidalgo L., *Electrodes for pH Sensing Based on Stainless Steel: Mechanism, Surface Modification, Potentiometric Performance, and Prospects*, Chemosensors, **2025**, 13(5), 160, https://doi.org/10.3390/chemosensors13050160
5. Hidalgo J., Hidalgo L., Serrano Aguiar C. D, García Madroñero D. B., Galambos I., Vilasó-Cadre J. E., Reyes-Domínguez I. A., Brânzanic A. M. V., Ignat N., **Turdean G. L.**✉**,** Study of *Caesalpinia spinosa* extracts as green corrosion inhibitor for mild steel, Langmuir, **2025**, https://pubs.acs.org/doi/10.1021/acs.langmuir.5c00224.
6. Vilasó-CadreJ. E., Hidalgo-Viteri J., González-FernándezL. A., Piña J. J., Leiva-Peláez O., Hidalgo L., Reyes-Domínguez I. A., Cruz R., Rodríguez-Torres I., Medellín-Castillo N. A., Arce-Castro J., Galambos I., **Turdean G .L.**✉, *Recent advances in electrochemical sensors applied to samples of industrial interest,* Microchemical Journal, **2024,** 210, 112931, DOI 10.1016/j.microc.2025.112931
7. Hidalgo J., Fort C. I. ✉, Galambos I., Jankovics H., Hidalgo L., **Turdean G. L.**✉, *TiO_2 aerogel − A sensing electrode matrix for the sensitive detection of diclofenac sodium*, Microchemical Journal, **2024**, 207, 111855
8. Fort C.I., Sanou A., Coulibaly M., Yao K.B., **Turdean G. L.** ✉, *Green modified electrode for sensitive simultaneous heavy metal ions electrodetection*, Sensors and Actuators B: Chemical, **2024**, 418, 136326
9. Hidalgo J., Galambos I., **Turdean G. L,** Hidalgo L., *A review of the determination of diclofenac sodium with electrochemically modified sensors in various biological, pharmaceutical and water sources*, Hungarian Journal of Industry and Chemistry, **2024**, 52(1), 79–88, DOI: 10.33927/hjic-2024-10
10. Vilasó-Cadre J. E., Reyes-Domínguez I. A., Cruz R., Rosales-Marín G., Rodríguez-Torres I., Castillo-Magallanes N., Hidalgo-Viteri J., **Turdean G. L.,** Hidalgo L., *Recent Advances on Impedimetric Electroanalysis with Non-commercial Portable Instruments: A Mini Review*, Periodica Polytechnica Chemical Engineering, **2024**, 68(4), 639–654, https://doi.org/10.3311/PPch.36918
11. Atchabarova A., Abduakhytova D., Avchukir K., **Turdean G.L.** ✉, Abdimomyn S., Tokpayev R., Khavaza T., Nauryzbayev M., *Study of Kazakhstan's shungite as electrocatalyst substrate in hydrogen evolution reaction in acidic media*, Studia Universitatis "Babes-Bolyai" Chemia, **2024**, 69(3), 25-34, https://doi.org/10.24193/subbchem.2024.3.02
12. Sanou A., Coulibaly M., N'dri S.R., Tămaș T. L., Bizo L., Frentiu T., Covaci E., Abro K. D. M., Dablé P. J.-M. R., Yao K. B., Fort C. I. ✉, **Turdean G.L.** ✉**,** *Raw clay material-based modified carbon paste electrodes for sensitive heavy metal detection in drinking water*, Journal of Materials Science, **2024**, 59(30), pp. 13961–13977
13. Vilasó-Cadre J. E. ✉, Reyes-DomínguezI. A. ✉, González-Fontanet J. G., Hidalgo-Viteri J., González-Fernández L. A, Arada-PérezM. Á., **Turdean G. L.**, *Voltammetry and Related Electrochemical Methods Based on Low-Cost Instrumentation: a Review from Basic to Advanced*, Journal of Analytical Chemistry, **2024**, Vol. 79, No. 5, pp. 520–539

14. Fort C.I., Cobzac C.S.A. ✉, **Turdean, G.L. ✉,** *Conductive polymer-based modified electrode for total antioxidant capacity determination*, Microchemical Journal, **2024**, 200, 110309, Q1
15. Atchabarova A., Abdimomyn S, Abduakhytova D., Kishibayev. K., Zlobina Y., Kurbatov A., **Turdean G. L.,** Djenizian T., *Electrochemical modification of the carbon material surface by hydroxyl groups*, Journal of Solid State Electrochemistry, **2024**, 28(7), pp. 2425–2436, https://doi.org/10.1007/s10008-023-05780-8, WOS:001132479300002
16. Hidalgo Viteri J., Cotolan N., Lupan A., Brânzanic A.M.V., **Turdean G. L. ✉,** *A poly(methyl methacrylate)–ibuprofen composite film as anticorrosive coating of Ti–6Al–4V surface*, Journal of Solid State Electrochemistry**,** **2024**, 28(2), pp. 479–494 https://doi.org/10.1007/s10008-023-05681-w
17. Hidalgo J. S., Toth E., Jankovics H., Fort C. I., **Turdean G. L. ✉,** Tombacz E., Galambos I., *Bioengineered Flagellin TiO2 anoparticle-Based Modied Glassy Carbon Electrodes as a Highly Selective Platform for the Determination of Diclofenac Sodium*, Chemosensors, **2023**, *11*, 576. https://doi.org/10.3390/chemosensors11120576.
18. Farkas N.-I., Marincaș L., Barbu-Tudoran L., Barabás R. ✉, **Turdean G. L ✉**, *Investigation of the real-time release of doxycycline from PLA-based nanofibers, Journal Functional Biomaterials*, **2023**, 14, 331, https://doi.org/10.3390/jfb14060331
19. Farkas N.-I., **Turdean G. L.**, Bizo L, Marincas L., Cadar O., Barbu-Tudoran L., Barabás R., *The effect of chemical composition and morphology on the drug delivery properties of hydroxyapatite-based biomaterials*, Ceramics International, **2023**, https://doi.org/10.1016/j.ceramint.2023.05.047
20. Ngo T. T. H. ✉, Pham T. H. Y., Dang N. T., Hoan N. T. V., Pham T. H., **Turdean G. L ✉**, *Graphite paste electrode modified with zeolitic imidazolate framework (ZIF-67) for the determination of acetaminophen*, Studia Universitatis "Babes-Bolyai" Chemia, **2023**, 68(1), pp. 7–17; https://doi.org/10.24193/subbchem.2023.1.01;
21. Belcovici A., Fort I. C., Mureşan L. E. ✉, Perhaiţa I., Borodi G., **Turdean G. L. ✉**, *Zinc oxide nanostructured platform for electrochemical detection of heavy metals*, Electroanalysis, **2023**, 35, e202200395, https://doi.org/10.1002/elan.202200395
22. Hidalgo Viteri J., Cotolan N. ✉, Barbu-Tudoran L., **Turdean G. L. ✉**, *A paracetamol - poly(3,4-ethylene dioxythiophene) composite film for drug release studies*, Materials Today Communications, **2023**, 34, 105084, https://doi.org/10.1016/j.mtcomm.2022.105084.
23. Abdimomyn S., Atchabarova A. ✉, Abduakhytova D., Tokpayev R., Kishibayev K., Khavaza T., Kurbatov A., Turdean G. L., Nauryzbayev M., *Investigation of the functional layer formation on the surface of carbon material*, Studia Universitatis "Babes-Bolyai" Chemia, **2022**, 67(4), 151-167, https://doi.org/10.24193/subbchem.2022.4.10.
24. Fort I. C., Cobzac S. C. A., **Turdean G. L. ✉,** *Second-order derivative of square-wave voltammetry for determination of vanillin at platinum electrode*, Food Chemistry, **2022**, 385, 132711.
25. Farkas N.-I., Marincas L., Barabás Réka, Bizo L., Ilea A., **Turdean G. L.**, Tosa M., Cadar O., Barbu-Tudoran L., *Preparation and Characterization of Doxycycline-Loaded Electrospun PLA/HAP Nanofibers as a Drug Delivery System*, Materials, **2022**, 15(6), 2105.

26. Marincas L., **Turdean G. L.**, Tosa M., Kovács Z., Kovács B., Barabás R., Farkas N.-I., Bizo L., *Hydroxyapatite and silicon-modified hydroxyapatite as drug carriers for 4-aminopyridine*, Crystals, **2021**, 11(9), 1124, **https://doi.org/10.3390/cryst11091124**
27. Barabas R., Fort C. I., **Turdean G. L. ✉,** Bizo L. ✉, *Influence of HAP on the morpho-structural properties and corrosion resistance of ZrO_2-based composites for biomedical applications*, Crystals, **2021**, 11(2), 202; (1-16 pag) **https://doi.org/10.3390/cryst11020202**
28. Ngo H. T. T., Fort I. C., Pham T. H., **Turdean G. L. ✉**, *Ordered Mesoporous Silica Incorporating Platinum Nanoparticles as Electrode Material for Paracetamol Detection*, Electroanalysis, **2021**, 33, 323-335. DOI 10.1002/elan.202060131.
29. Abdimomyn S., Abduakhytova D., Atchabarova A., Turdean G.L., Tokpayev R., Kishibayev K., Kurbatov A., Nauryzbayev M, *Optimization of the preparation method of a mechanically strong carbon electrode*, Bulletin of the Karaganda University Chemistry Series, **2021**, 104(4), pp. 95–103. https://doi.org/10.31489/2021Ch4/95-103
30. Constantiniuc M., Popa D., Ispas A., Bacali C., Burde A., Laza V., **Turdean G.,** *Dental radiology from an ecological perspective. The attitude of dentists regarding the management of the materials used in dental radiology*, Environmental Engineering and Management Journal, **2020**, 19(5), *755-760*.
31. Cotolan N., Mureşan L. M., Salis A., Barbu-Tudoran L., **Turdean G. L. ✉,** *Electrochemical detection of lead ions with ordered mesoporous silica-modified glassy carbon electrodes*, Water, Air and Soil Pollution, **2020**, 231, *217-224*.
32. Cotolan N., **Turdean G. L.,** Chelaru J. D., *Improving the corrosion resistance of mild steel by zinc-graphene oxide coatings*, Studia Universitatis Babes-Bolyai Chemia, **2020**, 65(3), *23-32*.
33. Ngo T. T. H., Fort I. C., Pham T. H., **Turdean G. L. ✉,** *Paracetamol detection at a graphite paste modified electrode based on platinum nanoparticles immobilised on Al-SBA-15 composite materia*l, Studia Universitatis Babes-Bolyai Chemia, **2020**, 65(1), 27-38.

34. Szoke A., Zsebe Z., **Turdean G. L**. ✉, Muresan L. M., *Composite Electrode Material Based on Electrochemically Reduced Graphene Oxide and Gold Nanoparticles for Electrocatalytic Detection of Ascorbic Acid*, Electrocatalysis, **2019**, 10, *573–583*; **IF/2017: 2.311, Q2/2016** (ScImagoJR).

35. S.-A. Dorneanu, E. Covaci, F. Imre-Lucaci, **G. L. Turdean ✉**, *Sensors array for monitoring and automation of the electrochemical recovery of metals from waste printed circuit boards*, Studia Universitatis Babes-Bolyai Chemia, **2019**, 64(2 TOM2), *555-565*; **IF/2017: 0.305, Q4/2016** (WoS, ScImagoJR).

36. I. C. Fort, **G. L. Turdean ✉**, R. Barabas, D. Popa, A. Ispas, M. Constantiniuc, *Study of the hydrogen peroxide based whitening gel on the corrosion of dental metallic alloys*, Studia Universitatis Babes-Bolyai Chemia, **2019**, 64 (1), *125-133*; **IF/2017: 0.305, Q4/2016** (WoS, ScImagoJR).
37. **Turdean G. L. ✉**, Craciun A., Popa D., Constantiniuc M., *Study of electrochemical corrosion of biocompatible Co–Cr and Ni–Cr dental alloys in artificial saliva. Influence of pH of the solution*, Materials Chemistry and Physics, **2019**, 233, *390-398*; **IF/2017: 2.781, Q2/2016** (ScImagoJR).

38. Rusu M. M., Fort C. I., Cotet L. C., Vulpoi A., Todea M., **Turdean G. L.,** Danciu V., Popescu I. C., Baia L., *Insights into the morphological and structural particularities of highly sensitive porous bismuth-carbon nanocomposites based electrochemical*, Sensors and Actuators B-Chem., **2018**, 268, *398-410*; **IF/2016: 5.401, Q1/2016** (WoS), (**Q1/2015, Q1/2016** ScImagoJR).

39. Sacara A. M., Nairi V., Salis A., **Turdean G. L**., Muresan L. M., *Silica-Modified Electrodes for electrochemical detection of Malachite Green*, Electroanalysis, **2017**, 29, *2602-2609*; **IF/2016: 2.851, Q2/2016** (WoS, ScImagoJR).

40. Deac A. R., Muresan L. M., Cotet L. C., Baia L. **Turdean G. L.** ✉, *Hybrid composite material based on graphene and polyhemin for electrochemical detection of hydrogen peroxide*, Journal of Electroanalytical Chemistry, **2017**, 802, *40-47*; **IF/2016: 3.012, Q2/2016** (WoS, ScImagoJR).

41. Morar C., **Turdean G. L.,** Bende A., Lameiras P., Antheaume C., Muresan L. M., Darabantu M., *New p-aminophenol-based dendritic melamines. Iterative synthesis, structure, and electrochemical characterisation*, Comptes Rendus Chimie, **2017**, 20(4), *402-414*; **IF/2016**: **1.879, Q2/2016** (WoS, ScImagoJR).

42. Deac A. R., Morar C., **Turdean G. L.,** Darabantu M., Gál E., Bende A., Muresan L. M., *Glassy carbon electrode modified with hemin and new melamine compounds for H_2O_2 amperometric detection*, Journal of Solid State Electrochemistry, **2016**, 20, *3071-3081*, doi:10.1007/s10008-016-3298-0; **IF/2016: 2.316, Q2**/(WoS, ScImagoJR).

43. **Turdean G. L.** ✉, Casoni D., Sarbu C., *Structure–electrochemical properties correlations of some phenol derivatives investigated by electrochemical techniques*, Journal of Iranian Chemical Society, **2016**, 13, *945–956*, doi: 10.1007/s13738-016-0810-5; **IF/2016: 1.407, Q3/2016** (WoS, ScImagoJR).

44. Szoke A. F., **Turdean G. L.** ✉, Muresan L. M., *Modified glassy carbon electrode based on myoglobin and reduced graphene oxide for H_2O_2 detection*, Bulgarian Chemical Communications, **2017**, 49, *147-154*; **IF/2016: 0.238, Q4/2016** (WoS, ScImagoJR).

45. Szoke A. F., **Turdean G. L.** ✉, Katona G., Muresan L. M., *Electrochemical determination of dopamine with grapheme-modified glassy carbon electrodes*, Studia Universitatis Babes-Bolyai Chemia, **2016**, 61(3TOM1), *135-144*; **IF/2016: 0.244, Q4/2016** (WoS, ScImagoJR).

46. Forţ C. I., Coteţ L. C., **Turdean G. L**, Danciu V., *Meldola Blue Immobilised on Mesoporous Carbon Aerogel - New Electrode Material for NADH Electrocatalytic Oxidation*, Studia Universitatis Babes-Bolyai Chemia, **2015**, 60(3), *215-224;* **IF/2016: 0.244, Q4/2016** (WoS), (**Q4/2015, Q4/2016**, ScImagoJR).

47. **Turdean G. L.** ✉, *Characterization of a Modified Graphite Electrode Obtained by Hemin Electropolymerisation*, Studia Universitatis Babes-Bolyai Chemia, **2015**, 60(3), *119-128;* **IF/2016: 0.244; Q4/2016** (WoS) (**Q4/2015, Q4/2016**, ScImagoJR).

48. **Turdean G. L.** ✉, Fort C. I., Simon V., *In vitro short-time stability of a bioactive glass-chitosan composite coating evaluated by using electrochemical methods*, Electrochimica Acta, **2015**, 182, *707-714*, doi: 10.1016/j.electacta.2015.09.132; **IF/2016: 4.798, Q1/2016** (WoS), (**Q1/2015,Q1/2016** ScImagoJR).

49. Deac A. R., Cotet L. C., **Turdean G. L.**, Muresan L. M., *Carbon paste electrode modified with Bi $^{3+}$ - impregnated carbon xerogel for Pb^{2+} determination by square wave anodic stripping*

voltammetry, Revue Roumaine de Chimie, **2015**, 60(7-8), *697-705*; **IF/2016: 0.246, Q4/2016** (WoS), (**Q4/2015, Q4/2016** ScImagoJR).

50. Silai I. E., Fort C. I., Casoni D., **Turdean G. L.** ✉, *Epinephrine detection at Pt-nanoparticles modified graphite electrode by square-wave voltammetry*, Revue Roumaine de Chimie, **2015**, 60(7-8), *689-696*; **IF/2016: 0.246, Q4/2016** (WoS), (**Q4/2015, Q4/2016** ScImagoJR).

51. Fort C. I., Cotet L. C., Vulpoi A., **Turdean G. L.**, Danciu V., Baia L., Popescu I. C., *Bismuth doped carbon xerogel nanocomposite incorporated in chitosan matrix for ultrasensitive voltammetric detection of Pb(II) and Cd(II)*, Sensors and Actuators B-Chem., **2015**, 220, *712-719*; **IF/2016: 5.401, Q1/2016** (WoS), (**Q1/2015,Q1/2016** ScImagoJR).

52. Deac A. R., Coteţ L. C., **Turdean G. L.**, Muresan L. M., *Determination of Cd(II) using square wave anodic stripping voltammetry at a carbon paste electrode containing Bi-impregnated carbon xerogel*, Studia Universitatis Babes-Bolyai Chemia, **2015**, 60(10), *203-212*; **IF/2016: 0.244, Q4/2016** (WoS), **(Q4/2015, Q4/2016** ScImagoJR).

53. Januzaj V., Mula V., **Turdean G. L.** ✉, Muresan L. M., *Composite electrodes with carbon supported Ru- nanoparticles for H_2O_2 detection*, Acta Chimica Slovenica, **2015**, 62, *28-34*, doi: 10.17344/acsi.2014.672; **IF/2016: 0.983, Q3/2016** (WoS), (**Q3/2015, Q3/2016** ScImagoJR).

54. **Turdean G. L.** ✉, *Electrochemical behavior of an iron substituted polyoxometalate incorporated in an electropolymerized film*, Materiale plastice, **2015**, 52(2), *225-229*; ISSN: 0025-5289; **IF/2016: 0.778, Q4/2016** (WoS), (**Q3/2015, Q3/2016**, ScImagoJR).

55. **Turdean G. L.** ✉, Szabo G., *Nitrite detection in meat products samples by square-wave voltammetry at a new single walled carbon naonotubes - myoglobin modified electrode*, Food Chemistry, **2015**, 179, *235-330*, http://dx.doi.org/10.1016/j.foodchem.2015.01.106; **IF/2016: 4.529, Q1/2016** (WoS), (**Q1/2015, Q1/2016** ScImagoJR)**.**

D. Lucrări publicate în ultimii 10 anii în reviste şi volume de conferinţe cu referenţi (neindexate)

- Reviste

1. Nu este cazul

- Selecţie cu maximum 20 lucrări în volume de conferinţe

1. Nu este cazul

E. Brevete obţinute în întreaga activitate

1. Nu este cazul

Data: **Semnătura:**

01.07.2025

A N E X A 4 . 1

Nume Prenume: **Barbu Lucian**
Gradul didactic: conferențiar

Instituția unde este titular: Universitatea Babeș-Bolyai

Facultatea: Biologie si Geologie
Departamentul: Biologie Moleculară și Biotehnologie

L I S T A
lucrărilor ştiinţifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat
Contributii privind structura, ultrastructura si functiile corpusculului de glicogen

B. Cărţi si capitole în cărţi publicate în ultimii 10 ani
B1.
B2.
B3.

C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani
C1.

1. Targeting JAK/STAT3 in glioblastoma cells using an alginate-PNIPAm molecularly imprinted hydrogel for the sustained release of ruxolitinib Authors (8): Baraian, Alexandra-Iulia; Raduly, Lajos ... Bodoki, Ede Published: Apr 2025 in International Journal of Biological Macromolecules
2. DOI: 10.1016/J.IJBIOMAC.2025.140025 Accession Number: WOS:001407355600001
3. Identification of distinct profiles of glioblastoma through the immunocapture of extracellular vesicles from patient plasma Authors (8): Manu, Doina Ramona; Balasa, Rodica ... Balasa, Adrian Published: Mar 2025 in Plos One DOI: 10.1371/JOURNAL.PONE.0315890 Accession Number: WOS:001449697200030
4. Urban Traffic's Influence on Noise and Particulate Matter Pollution Authors (5): Avram, Simona Elena; Tudoran, Lucian Barbu ... Petean, Ioan Published: Mar 2025 in Sustainability DOI: 10.3390/SU17052077 Accession Number: WOS:001443472600001
5. Tobacco Residues Deposition at the Surface of Cobalt-Chromium Dental Alloys and the Effect of Cigarette Smoke Extract on Human Mesenchymal Stem Cells: An In Vitro Study Authors (11): Uriciuc, Willi-Andrei; Bosca, Bianca Adina ... Ilea, Aranka Published: Feb 2025 in Coatings DOI: 10.3390/COATINGS15030279 Accession Number: WOS:001451984100001

6. Preclinical pharmaco-toxicological screening of biomimetic melanin-like nanoparticles as a potential therapeutic strategy for cutaneous melanoma Authors (10): Marcovici, Iasmina; Chioibas, Raul ... Dehelean, Cristina Adriana Published: Feb 2025 in Frontiers in Pharmacology
7. DOI: 10.3389/FPHAR.2025.1487854 Accession Number: WOS:001425595600001
8. Sensitive Detection of Kynurenic Acid from Biological Fluids Using a Flexible Electrochemical Platform Based on Gold Nanoparticles and Reduced Graphene Oxide Authors (6): Macovei, Diana-Gabriela; Tertis, Mihaela ... Cristea, Cecilia Published: Feb 2025 in International Journal of Molecular Sciences DOI: 10.3390/IJMS26030913 Accession Number: WOS:001418592200001
9. Blue micro-/nanoplastics abundance in the environment: a double threat as a Trojan horse for a plastic-Cu-phthalocyanine pigment and an opportunity for nanoplastic detection via micro-Raman spectroscopy Authors (4): Cardan, Ioana; Nesterovschi, Ion ... Pinzaru, Simona Cinta Published: 2025 in Environmental Science: Nano DOI: 10.1039/D4EN00820K Accession Number: WOS:001432869400001
10. Nanoencapsulation of citrus essential oils in systematic modified chitosanbased nanofibers Authors (5): Ulici, Adelina Maria; Gaina-Gardiuta, Artiom ... Podea, Paula Veronica Published: Dec 2024 in Journal of Applied Polymer Science DOI: 10.1002/APP.56176 Accession Number: WOS:001321810100001
11. Mineral Powder Extraction by the Natural Drying of Water from the Public Springs in Borsec Authors (5): Avram, Simona Elena; Platon, Denisa Viviana ... Petean, Ioan Published: Dec 2024 in Applied Sciences DOI: 10.3390/APP142310806 Accession Number: WOS:001376244600001
12. Natural Fiber Reinforcement of Ceramic Slurry Compacts Authors (6): Avram, Simona Elena; Tudoran, Lucian Barbu ... Petean, Ioan Published: Dec 2024 in Journal of Composites Science DOI: 10.3390/JCS8120542 Accession Number: WOS:001386892900001
13. Astrocyte Dysfunction Reflected in Ischemia-Induced Astrocyte-Derived Extracellular Vesicles: A Pilot Study on Acute Ischemic Stroke Patients Authors (4): Forro, Timea; Manu, Doina Ramona ... Balasa, Rodica Published: Nov 2024 in International Journal of Molecular Sciences DOI: 10.3390/IJMS252212471 Accession Number: WOS:001365461000001
14. Investigating the Role of Microclimate and Microorganisms in the Deterioration of Stone Heritage: The Case of Rupestrian Church from Jac, Romania Authors (13): Ilies, Dorina Camelia; Apopei, Andrei-Ionut ... Noje, Ioan-Cristian Published: Sep 2024 in Applied Sciences DOI: 10.3390/APP14188136 Accession Number: WOS:001323463100001
15. Preserving Cultural Heritage: Enhancing Limestone Durability with Nano-TiO2 Coating Authors (14): Ilies, Dorina Camelia; Apopei, Andrei-Ionut ... Gligor, Emil-Traian Published: Sep 2024 in Heritage DOI: 10.3390/HERITAGE7090232 Accession Number: WOS:001326128400001
16. Biologically Synthesized Gold Nanoparticles with Enhanced Antioxidant and Catalytic Properties Authors (5): David, Melinda; Enache, Teodor A. ... Florescu, Monica Published: Sep 2024 in Pharmaceuticals DOI: 10.3390/PH17091105 Accession Number: WOS:001322890400001

17. Calcium Acetate Drug Produced from Rapana venosa Invasive Gastropod Shells: Green Process Control Assisted by Raman Technology Authors (6): Dumitru, Danut-Alexandru; Poplacean, Iuliana-Cornelia ... Pinzaru, Simona Cinta Published: Aug 2024 in ACS Omega DOI: 10.1021/ACSOMEGA.4C04138 Accession Number: WOS:001305387100001
18. Interaction of Low-Density Polyethylene Nanofragments with Autotrophic and Chemotrophic Bacteria Authors (16): Ciorita, Alexandra; Suciu, Maria ... **Barbu-Tudoran, Lucian** Published: Jul 2024 in ACS Sustainable Chemistry & Engineering DOI: 10.1021/ACSSUSCHEMENG.4C02440 Accession Number: WOS:001274476900001
19. Effect of Silver Vanadate Nanowires Addition on Structural and Morphological Properties of Dental Porcelain Prepared from Economic Raw Materials Authors (5): Sakhkhane, Badr Eddine; Muresan-Pop, Marieta ... Bizo, Liliana Published: Jul 2024 in Crystals DOI: 10.3390/CRYST14070616 Accession Number: WOS:001276535300001
20. Ultrastructure of the Bovine Testis in Cattle (Bos taurus): New View Authors (8): Michalek, Katarzyna; Grabowska, Marta ... Suciu, Maria Published: Jun 2024 in Animals DOI: 10.3390/ANI14121777 Accession Number: WOS:001254993100001
21. Label-free aptasensor targeting Staphylococcus aureus surface Protein A Authors (8): Canciu, Alexandra; Tataru, Ana -Maria ... Cristea, Cecilia Published: Jun 2024 in Microchemical Journal
22. DOI: 10.1016/J.MICROC.2024.110586 Accession Number: WOS:001232334500001
23. Raman Technology for Process Control: Waste Shell Demineralization for Producing Transparent Polymer Foils Reinforced with Natural Antioxidants and Calcium Acetate By-Products Authors (8): Pinzaru, Simona Cinta; Poplacean, Iuliana-Cornelia ... Neculai, Bogdan
24. Published: Apr 2024 in Processes DOI: 10.3390/PR12040832 Accession Number: WOS:001210418900001
25. Do the untreated surfaces of orthodontic mini-implants have osseointegration? Authors (9): Jiman (Termure), Paula; Baciut, Mihaela ... Baciut, Grigore Published: Apr 2024 in Romanian Journal of Oral Rehabilitation DOI: 10.6261/RJOR.2024.2.16.67 Accession Number: WOS:001250408000066
26. A Study of Hyaluronic Acid's Theoretical Reactivity and of Magnetic Nanoparticles Capped with Hyaluronic Acid Authors (6): Racuciu, Mihaela; Oancea, Simona ... Creanga, Dorina Published: Mar 2024 in Materials DOI: 10.3390/MA17061229 Accession Number: WOS:001192559800001
27. COVID-19-Associated Rhino-Orbital Mucormycosis: Histological and Electron Microscopy Characteristics Authors (13): Jeican, Ionut Isaia; Horhat, Delia Ioana ... Albu, Silviu Published: Feb 2024 in Diagnostics DOI: 10.3390/DIAGNOSTICS14040429 Accession Number: WOS:001172313200001
28. Pilot SERS Monitoring Study of Two Natural Hypersaline Lake Waters from a Balneary Resort during Winter-Months Period Authors (6): Molnar, Csilla; Drigla, Teodora Diana ... Cinta Pinzaru, Simona Published: Jan 2024 in Biosensors DOI: 10.3390/BIOS14010019 Accession Number: WOS:001149523900001

29. A new form of severe acute localized reactions following intra-articular hyaluronic acid injections in knee osteoarthritis. A case report Authors (6): Fodor, Daniela; Serban, Oana ... Badarinza, Maria Published: 2024 in Medical Ultrasonography DOI: 10.11152/MU-4415 Accession Number: WOS:001398309400011
30. Synthesis and characterization of cofe2o4 2 o 4 nanoparticles and cofe2o4@batio3 nanocomposites for biomedical applications Authors (5): Dudric, R.; Bortnic, R. ... Tetean, R. Published: 2024 in Romanian Journal in Physics DOI: 10.59277/ROMJPHYS.2024.69.611 Accession Number: WOS:001329051200015
31. Genome-wide transcriptional response to silver stress in extremely halophilic archaeon Haloferax alexandrinus DSM 27206 T Authors (5): Buda, Doriana Madalina; Szekeres, Edina ... Banciu, Horia Leonard Published: Dec 2023 in BMC Microbiology DOI: 10.1186/S12866-023-03133-Z
32. Accession Number: WOS:001113698700003
33. Phenolic profile of micro- and nano-encapsulated olive leaf extract in biscuits during in vitro gastrointestinal digestion Authors (12): Ciont, Calina; Difonzo, Graziana ... Vodnar, Dan Cristian
34. Published: Dec 2023 in Food Chemistry DOI: 10.1016/J.FOODCHEM.2023.136778 Accession Number: WOS:001040846000001
35. Facile Preparation of PVDF/CoFe2O4-ZnO Hybrid Membranes for Water Depollution Authors (6): Popa, Adriana; Stefan, Maria ... Toloman, Dana Published: Dec 2023 in Polymers DOI: 10.3390/POLYM15234547 Accession Number: WOS:001117609500001
36. Green Biocidal Nanotechnology Use for Urban Stone-Built Heritage-Case Study from Oradea, Romania Authors (14): Ilies, Dorina Camelia; Blaga, Lucian ... Hossain, Mallik Akram Published: Sep 2023 in Minerals DOI: 10.3390/MIN13091170 Accession Number: WOS:001075123800001
37. Deep eutectic solvent PCL-based nanofibers as drug delivery system Authors (5): Marincas, Laura; Farkas, Noemi-Izabella ... Tosa, Monica Ioana Published: Aug 2023 in Materials Chemistry and Physics DOI: 10.1016/J.MATCHEMPHYS.2023.127862 Accession Number: WOS:001001835200001
38. The effect of chemical composition and morphology on the drug delivery properties of hydroxyapatite-based biomaterials Authors (7): Farkas, Noemi-Izabella; Turdean, Graziella Liana ... Reka, Barabas Published: Aug 2023 in Ceramics International DOI: 10.1016/J.CERAMINT.2023.05.047 Accession Number: WOS:001025781100001
39. In Vitro Study of Composite Cements on Mesenchymal Stem Cells of Palatal Origin Authors (9): Ardelean, Alina Ioana; Dragomir, Madalina Florina ... Oana, Liviu Published: Jul 2023 in International Journal of Molecular Sciences DOI: 10.3390/IJMS241310911 Accession Number: WOS:001028320000001
40. Investigation of the Real-Time Release of Doxycycline from PLA-Based Nanofibers Authors (5): Farkas, Noemi-Izabella; Marincas, Laura ... Turdean, Graziella Liana Published: Jun 2023 in Journal of Functional Biomaterials DOI: 10.3390/JFB14060331 Accession Number: WOS:001017483400001

41. Sanguisorba minor Scop.: An Overview of Its Phytochemistry and Biological Effects Authors (7): Tocai (Motoc), Alexandra Cristina; Kokeric, Tijana ... Vicas, Simona Ioana Published: May 2023 in Plants DOI: 10.3390/PLANTS12112128 Accession Number: WOS:001002931500001
42. Gold vs. Silver Colloidal Nanoparticle Films for Optimized SERS Detection of Propranolol and Electrochemical-SERS Analyses Authors (11): Muntean, Cristina M.; Cuibus, Denisa ... Farcau, Cosmin Published: May 2023 in Biosensors DOI: 10.3390/BIOS13050530 Accession Number: WOS:000995664300001
43. Characterization of a Graphene Oxide-Reinforced Whey Hydrogel as an Eco-Friendly Absorbent for Food Packaging Authors (7): Lopes, Pompilia Mioara Purcea; Moldovan, Dumitrita ... Popescu, Violeta Published: Apr 2023 in Gels DOI: 10.3390/GELS9040298 Accession Number: WOS:000981008200001
44. Surface enhanced fluorescence potential of ZnO nanoparticles and gold decorated ZnO nanostructures embedded in a polyvinyl alcohol matrix Authors (7): Falamas, A.; Marica, I. ... Farcau, C. Published: Apr 2023 in Journal of Photochemistry and Photobiology A: Chemistry DOI: 10.1016/J.JPHOTOCHEM.2022.114516 Accession Number: WOS:000995301000001
45. In Vitro Degradation of Mg-Doped ZrO2 Bioceramics at the Interface with Xerostom® Saliva Substitute Gel Authors (5): Bizo, Liliana; Muresan-Pop, Marieta ... Berar, Antonela Published: Apr 2023 in Materials DOI: 10.3390/MA16072680 Accession Number: WOS:000970048800001
46. Material Evidence of Sediments Recovered from Ancient Amphorae Found at the Potaissa Roman Fortress Authors (11): Farcas, Iulia Alexandra; Dippong, Thomas ... Bunea, Claudiu Ioan
47. Published: Apr 2023 in Materials DOI: 10.3390/MA16072628 Accession Number: WOS:000970058500001
48. pH-Dependent Behavior of Novel 5-FU Delivery System in Environmental Conditions Comparable to the Gastro-Intestinal Tract Authors (7): Lazar, Geza; Nekvapil, Fran ... Cinta Pinzaru, Simona Published: Mar 2023 in Pharmaceutics DOI: 10.3390/PHARMACEUTICS15031011 Accession Number: WOS:000956967800001
49. Cave Thiovulum (Candidatus Thiovulum stygium) differs metabolically and genomically from marine species Authors (15): Bizic, Mina; Brad, Traian ... Sarbu, Serban M. Published: Mar 2023 in The ISME Journal DOI: 10.1038/S41396-022-01350-4 Accession Number: WOS:000900070100001
50. A paracetamol-poly(3,4-ethylenedioxythiophene) composite film for drug release studies Authors (4): Viteri, Juan Hidalgo; Cotolan, Nicoleta ... Turdean, Graziella Liana Published: Mar 2023 in Materials Today Communications DOI: 10.1016/J.MTCOMM.2022.105084 Accession Number: WOS:001018863800001
51. Photocatalytic Self-Cleaning PVDF Membrane Blended with MWCNT-ZnO Nanocomposites for RhB Removal Authors (5): Toloman, Dana; Stefan, Maria ... Popa, Adriana Published: Mar 2023 in Coatings DOI: 10.3390/COATINGS13030594 Accession Number: WOS:000958747400001

52. New fluorescent electrospun polymer materials containing phenothiazinyl carboxylate metal salts for versatile latent fingerprint detection Authors (9): Gal, Melinda; Cristea, Castelia ... Gaina, Luiza Ioana Published: Mar 2023 in Dyes and Pigments DOI: 10.1016/J.DYEPIG.2023.111085
53. Accession Number: WOS:000994898000001
54. A Local Desiccant Antimicrobial Agent as an Alternative to Adjunctive Antibiotics in the Treatment of Periodontitis: A Narrative Review Authors (10): Micu, Iulia C.; Muntean, Alexandrina ... Delean, Ada G. Published: Mar 2023 in Antibiotics DOI: 10.3390/ANTIBIOTICS12030456 Accession Number: WOS:000953214500001
55. Ruxolitinib-Loaded Imprinted Polymeric Drug Reservoir for the Local Management of Post-Surgical Residual Glioblastoma Cells Authors (8): Baraian, Alexandra-Iulia; Iacob, Bogdan-Cezar ... Bodoki, Ede Published: Feb 2023 in Polymers DOI: 10.3390/POLYM15040965 Accession Number: WOS:000941649500001
56. In Vitro and In Vivo Characterisation of a Mucoadhesive Buccal Film Loaded with Doxycycline Hyclate for Topical Application in Periodontitis Authors (15): Dinte, Elena; Muntean, Dana Maria ... Ilea, Aranka Published: Feb 2023 in Pharmaceutics DOI: 10.3390/PHARMACEUTICS15020580 Accession Number: WOS:000941657000001
57. Modification of Cotton and Leather Surfaces Using Cold Atmospheric Pressure Plasma and TiO2-SiO2-Reduced Graphene Oxide Nanopowders Authors (9): Cosma, Dragos-Viorel; Tudoran, Cristian ... Stanculescu, Ioana Published: Feb 2023 in Materials DOI: 10.3390/MA16041397 Accession Number: WOS:000941575000001
58. Spray pyrolysis-assisted fabrication of Eu-doped ZnO thin films for antibacterial activities under visible light irradiation Authors (13): Ech-Chergui, Abdelkader Nebatti; Kadari, Ali Sadek ... Amrani, Bouhalouane Published: Feb 2023 in Chemical Papers-chemicke Zvesti DOI: 10.1007/S11696-022-02543-Z Accession Number: WOS:000869625800002
59. The Antimelanoma Biological Assessment of Triterpenic Acid Functionalized Gold Nanoparticles Authors (10): Mioc, Marius; Mioc, Alexandra ... Soica, Codruta Published: Jan 2023 in Molecules DOI: 10.3390/MOLECULES28010421 Accession Number: WOS:000908874600001
60. The Biological Activity of Fragmented Computer-Aided Design/Manufacturing Dental Materials before and after Exposure to Acidic Environment Authors (6): Ille, Codruta Eliza; Moaca, Elena-Alina ... Jivanescu, Anca Published: Jan 2023 in Medicina DOI: 10.3390/MEDICINA59010104
61. Accession Number: WOS:000927539900001
62. Biologic Impact of Green Synthetized Magnetic Iron Oxide Nanoparticles on Two Different Lung Tumorigenic Monolayers and a 3D Normal Bronchial Model-EpiAirway™ Microtissue Authors (11): Moaca, Elena-Alina; Watz, Claudia ... Dehelean, Cristina Adriana Published: Jan 2023 in Pharmaceutics DOI: 10.3390/PHARMACEUTICS15010002 Accession Number: WOS:000918975700001

63. Secretory structures in artemisia abrotanum l. (Asteraceae) Authors (3): Tamas, Mircea; Barbu-Tudoran, Lucian; Coste, Ana Published: 2023 in Contributii Botanice DOI: 10.24193/CONTRIB.BOT.58.2 Accession Number: BCI:BCI202400251993
64. Investigation of ferrous conglomerate particles found in carwash slurry and their environmental implications Authors (5): Avram, Simona Elena; Filip, Miuta Rafila ... Petean, Ioan Published: 2023 in Studia Chemia DOI: 10.24193/SUBBCHEM.2023.4.05 Accession Number: WOS:001163865500005
65. Tracking soil particle deposition using bio-indication evidence and nondestructive FESEM and EDS analyses: A preliminary (pilot) study Authors (5): Balabanova, Biljana; Boev, Ivan ... Suciu, Maria Published: 2023 in Macedonian Journal of Ecology and Environment DOI: 10.59194/MJEE23252135B Accession Number: BCI:BCI202400196052
66. Trojan horse treatment based on PEG-coated extracellular vesicles to deliver doxorubicin to melanoma in vitro and in vivo Authors (19): Patras, Laura; Ionescu, Aura Elena ... Banciu, Manuela Published: Dec 2022 in Cancer Biology & Therapy DOI: 10.1080/15384047.2021.2003656 Accession Number: WOS:000735812200001
67. Characterization and In Vitro Biocompatibility of Two New Bioglasses for Application in Dental Medicine-A Preliminary Study Authors (10): Clichici, Andra; Filip, Gabriela Adriana ... Stefan, Razvan Published: Dec 2022 in Materials DOI: 10.3390/MA15249060 Accession Number: WOS:000902946400001
68. Maslinic Acid Derivative Nanoemulsion: Physicochemical Characterization, Antimicrobial Activity and Three-Dimensional (3D) Reconstructed Human Epidermal Model Screening Authors (12): Magyari-Pavel, I. Z.; Vlaia, L. ... Danciu, C. Published: Dec 2022 in Planta Medica
69. Accession Number: WOS:000921330500465
70. Mechanical Properties of Orthodontic Cements and Their Behavior in Acidic Environments Authors (11): Iosif, Cristina; Cuc, Stanca ... Chifor, Radu Published: Nov 2022 in Materials DOI: 10.3390/MA15227904 Accession Number: WOS:000887389900001
71. The Anti-Melanoma Effect of Betulinic Acid Functionalized Gold Nanoparticles: A Mechanistic In Vitro Approach Authors (12): Ghiulai, Roxana; Mioc, Alexandra ... Soica, Codruta Published: Nov 2022 in Pharmaceuticals DOI: 10.3390/PH15111362 Accession Number: WOS:000895221200001
72. Low-Molecular-Weight Heparins (LMWH) and Synthetic Factor X Inhibitors Can Impair the Osseointegration Process of a Titanium Implant in an Interventional Animal Study Authors (12): Apostu, Dragos; Berechet, Bianca ... Piciu, Doina Published: Nov 2022 in Medicina DOI: 10.3390/MEDICINA58111590 Accession Number: WOS:000912449300001
73. Synthesis and Characterization of Bioactive Magnetic Nanoparticles from the Perspective of Hyperthermia Applications Authors (13): Elena-Alina, Moaca; Socoliuc, Vlad ... Dehelean, Cristina Adriana Published: Nov 2022 in Magnetochemistry DOI: 10.3390/MAGNETOCHEMISTRY8110145 Accession Number: WOS:000895235100001
74. Circulating Small EVs miRNAs as Predictors of Pathological Response to Neo- Adjuvant Therapy in Breast Cancer Patients Authors (14): Baldasici, Oana; Balacescu, Loredana ...

Balacescu, Ovidiu Published: Oct 2022 in International Journal of Molecular Sciences DOI: 10.3390/IJMS232012625 Accession Number: WOS:000873309700001

75. The Effect of Repeated Restraint Stress on Neuroglobin-Oligodendrocytes Functions in the CA3 Hippocampal Area and Their Involvements in the Signaling Pathways of the Stress-Induced Anxiety Authors (8): Toma, Vlad-Alexandru; Dume, Bogdan ... Sevastre-Berghian, Alexandra-Cristina Published: Sep 2022 in Applied Sciences DOI: 10.3390/APP12178680 Accession Number: WOS:000850949800001
76. The effect of 100-200 nm ZnO and TiO2 nanoparticles on the in vitro-grown soybean plants Authors (18): Leopold, Loredana F.; Coman, Cristina ... Coman, Vasile Published: Aug 2022 in Colloids and Surfaces B: Biointerfaces DOI: 10.1016/J.COLSURFB.2022.112536 Accession Number: WOS:000804114600001
77. Green Synthesis of Silver Nanoparticles Using Populi gemmae Extract: Preparation, Physicochemical Characterization, Antimicrobial Potential and In Vitro Antiproliferative Assessment Authors (11): Kis, Brigitta; Moaca, Elena-Alina ... Danciu, Corina Published: Jul 2022 in Materials DOI: 10.3390/MA15145006 Accession Number: WOS:000831503200001
78. A Fast, Reliable Oil-In-Water Microemulsion Procedure for Silica Coating of Ferromagnetic Zn Ferrite Nanoparticles Capable of Inducing Cancer Cell Death In Vitro Authors (9): Nitica, Stefan; Fizesan, Ionel ... Iacovita, Cristian Published: Jul 2022 in Biomedicines DOI: 10.3390/BIOMEDICINES10071647 Accession Number: WOS:000833230100001
79. Interdisciplinary Research to Advance Digital Imagery and Natural Compounds for Eco-Cleaning and for Preserving Textile Cultural Heritage Authors (13): Ilies, Dorina Camelia; Zlatev, Zlatin ... **Lucian, Barbu-Tudoran** Published: Jun 2022 in Sensors DOI: 10.3390/S22124442 Accession Number: WOS:000817466900001
80. Biosynthesis of Iron Oxide Nanoparticles: Physico-Chemical Characterization and Their In Vitro Cytotoxicity on Healthy and Tumorigenic Cell Lines Authors (12): Moaca, Elena-Alina; Watz, Claudia Geanina ... Dehelean, Cristina Adriana Published: Jun 2022 in Nanomaterials DOI: 10.3390/NANO12122012 Accession Number: WOS:000816457500001
81. Comparative screening the life-time composition and crystallinity variation in gilthead seabream otoliths Sparus aurata from different marine environments Authors (12): Lazar, Geza; Nekvapil, Fran ... Cinta Pinzaru, Simona Published: Jun 2022 in Scientific Reports DOI: 10.1038/S41598-022-13667-3 Accession Number: WOS:000809441100022
82. Study on the Surface of Cobalt-Chromium Dental Alloys and Their Behavior in Oral Cavity as Cast Materials Authors (12): Uriciuc, Willi Andrei; Bosca, Adina Bianca ... Ilea, Aranka Published: May 2022 in Materials DOI: 10.3390/MA15093052 Accession Number: WOS:000795395100001
83. Aspartic Acid Stabilized Iron Oxide Nanoparticles for Biomedical Applications Authors (8): Racuciu, Mihaela; Barbu-Tudoran, Lucian ... Creanga, Dorina E. Published: Apr 2022 in Nanomaterials DOI: 10.3390/NANO12071151 Accession Number: WOS:000781836600001
84. Antimicrobial activity of graphene oxide-coated polypropylene surfaces Authors (10): Pop, Lucian Cristian; Barta, Gabriel ... Danciu, Virginia Published: Mar 2022 in Studia Chemia DOI: 10.24193/SUBBCHEM.2022.1.18 Accession Number: WOS:000776596900018

85. Preparation and Characterization of Doxycycline-Loaded Electrospun PLA/HAP Nanofibers as a Drug Delivery System Authors (9): Farkas, Noemi-Izabella; Marincas, Laura ... **Barbu-Tudoran, Lucian** Published: Mar 2022 in Materials DOI: 10.3390/MA15062105 Accession Number: WOS:000775035000001
86. 3D Printed Metal Oxide-Polymer Composite Materials for Antifouling Applications Authors (17): Bouranta, Andrianna; Tudose, Ioan Valentin ... Koudoumas, Emmanouel Published: Mar 2022 in Nanomaterials DOI: 10.3390/NANO12060917 Accession Number: WOS:000774571000001
87. Synthesis and Structural Characterization of CaO-P2O5-CaF:CuO Glasses with Antitumoral Effect on Skin Cancer Cells Authors (7): Vedeanu, Nicoleta Simona; Lujerdean, Cristian ... Stefan, Razvan Published: Feb 2022 in Materials DOI: 10.3390/MA15041526 Accession Number: WOS:000765082200001
88. Non-invasive laparoscopic detection of small tumors of the digestive tract using inductive sensors of proximity Authors (15): Calborean, Adrian; Macavei, Sergiu ... Bintintan, Vasile Published: Jan 2022 in Scientific Reports DOI: 10.1038/S41598-022-04822-X Accession Number: WOS:000742753500024
89. Design, in vitro bioactivity and in vivo influence on oxidative stress and matrix metalloproteinases of bioglasses in experimental skin wound Authors (14): Filip, Gabriela Adriana; Achim, Marcela ... Stefan, Razvan Published: Dec 2021 in Journal of Trace Elements in Medicine and Biology DOI: 10.1016/J.JTEMB.2021.126846 Accession Number: WOS:000702858200008
90. Hybrid PVDF-P(L-DOPA)-ZnO membranes for dyes and antibiotics removal through simultaneous action of adsorption and photocatalysis processes Authors (10): Popa, Adriana; Toloman, Dana ... Pana, Ovidiu Published: Dec 2021 in Journal of Environmental Chemical Engineering DOI: 10.1016/J.JECE.2021.106812 Accession Number: WOS:000725667000008
91. Silica Coating of Ferromagnetic Iron Oxide Magnetic Nanoparticles Significantly Enhances Their Hyperthermia Performances for Efficiently Inducing Cancer Cells Death In Vitro Authors (12): Iacovita, Cristian; Fizesan, Ionel ... Lucaciu, Constantin Mihai Published: Dec 2021 in Pharmaceutics DOI: 10.3390/PHARMACEUTICS13122026 Accession Number: WOS:000741822700001
92. Toxicological Profile of Biological Environment of Two Elastodontic Devices Authors (11): Dinu, Stefania; Buzatu, Roxana ... Pricop, Marius Published: Dec 2021 in Processes DOI: 10.3390/PR9122116 Accession Number: WOS:000737340600001
93. Development and characterization of magnetic iron oxide nanoparticles using microwave for the combustion reaction ignition, as possible candidates for biomedical applications Authors (6): Capraru, Aylin; Moaca, Elena-Alina ... **Barbu-Tudoran, Lucian** Published: Dec 2021 in Powder Technology DOI: 10.1016/J.POWTEC.2021.08.093 Accession Number: WOS:000709485300001
94. The adhesion of L-methionine amino acid through Dip Pen Nanolithography on silver thin films grown by Molecular Beam Epitaxy technique Authors (7): Calborean, Adrian; Colnita, Alia ...

Marconi, Daniel Published: Nov 2021 in Journal of Molecular Structure DOI: 10.1016/J.MOLSTRUC.2021.131247 Accession Number: WOS:000702875600009

95. Polydopamine-Assisted Surface Modification of Ti-6Al-4V Alloy with Anti-Biofilm Activity for Dental Implantology Applications Authors (12): Marinas, Ioana Cristina; Tihauan, Bianca Maria ... Filip, Claudiu Published: Nov 2021 in Coatings DOI: 10.3390/COATINGS11111385 Accession Number: WOS:000727869100001
96. Biomimetic Composite Coatings for Activation of Titanium Implant Surfaces: Methodological Approach and In Vivo Enhanced Osseointegration Authors (8): Oltean-Dan, Daniel; Dogaru, Gabriela-Bombonica ... Tomoaia, Gheorghe Published: Nov 2021 in Micromachines DOI: 10.3390/MI12111352 Accession Number: WOS:000725796100001
97. Rapid and Application-Tailored Assessment Tool for Biogenic Powders from Crustacean Shell Waste: Fourier Transform-Infrared Spectroscopy Complemented with X-ray Diffraction, Scanning Electron Microscopy, and Nuclear Magnetic Resonance Spectroscopy Authors (11): Ogresta, Lovro; Nekvapil, Fran ... Pinzaru, Simona Cinta Published: Oct 2021 in ACS Omega DOI: 10.1021/ACSOMEGA.1C03279 Accession Number: WOS:000711728500018
98. Novel Drug Carrier: 5-Fluorouracil Formulation in Nanoporous Biogenic Mgcalcite from Blue Crab Shells-Proof of Concept Authors (7): Lazar, Geza; Nekvapil, Fran ... Pinzaru, Simona Cinta
99. Published: Oct 2021 in ACS Omega DOI: 10.1021/ACSOMEGA.1C03285 Accession Number: WOS:000711728500019
100. Microbiological, Health and Comfort Aspects of Indoor Air Quality in a Romanian Historical Wooden Church Authors (17): Marcu, Florin; Hodor, Nicolaie ... Safarov, Bahodirhon Published: Sep 2021 in International Journal of Environmental Research and Public Health DOI: 10.3390/IJERPH18189908 Accession Number: WOS:000700718500001
101. Respiratory Nasal Mucosa in Chronic Rhinosinusitis with Nasal Polyps versus COVID-19: Histopathology, Electron Microscopy Analysis and Assessing of Tissue Interleukin-33 Authors (18): Jeican, Ionut Isaia; Gheban, Dan ... Junie, Lia Monica Published: Sep 2021 in Journal of Clinical Medicine DOI: 10.3390/JCM10184110 Accession Number: WOS:000699672300001
102. Cytotoxic Effects on Gingival Mesenchymal Stromal Cells and Root Surface Modifications Induced by Some Local Antimicrobial Products Used in Periodontitis Treatment Authors (10): Lupse, Irina; Pall, Emoke ... Soanca, Andrada Published: Sep 2021 in Materials DOI: 10.3390/MA14175049 Accession Number: WOS:000694328900001
103. In Vivo Distribution of Poly(ethylene glycol) Functionalized Iron Oxide Nanoclusters: An Ultrastructural Study Authors (10): Suciu, Maria; Mirescu, Claudiu ... **Barbu-Tudoran, Lucian** Published: Sep 2021 in Nanomaterials DOI: 10.3390/NANO11092184 Accession Number: WOS:000701412400001
104. Evidence of SARS-CoV-2 Virus in the Middle Ear of Deceased COVID-19 Patients Authors (14): Jeican, Ionut Isaia; Aluas, Maria ... Junie, Lia Monica Published: Sep 2021 in Diagnostics
105. DOI: 10.3390/DIAGNOSTICS11091535 Accession Number: WOS:000699386000001
106. Investigations of the Surface of Heritage Objects and Green Bioremediation: Case Study of Artefacts from Maramures, Romania Authors (10): Ilies, Dorina Camelia; Hodor, Nicolaie ...

Grama, Vasile Published: Jul 2021 in Applied Sciences DOI: 10.3390/APP11146643 Accession Number: WOS:000675911500001

107. Stochastic biosensors based on N- and S-doped graphene for the enantioanalysis of aspartic acid in biological samples Authors (5): Stefan-van Staden, Raluca-Ioana; Gheorghe, Damaris-Cristina ... Pruneanu, Stela Maria Published: Jul 2021 in RSC Advances DOI: 10.1039/D1RA02066H Accession Number: WOS:000671447100013
108. Morphological and Micromorphological Description of the Larvae of Two Endemic Species of Duvalius (Coleoptera, Carabidae, Trechini) Authors (3): Sitar, Cristian; Barbu-Tudoran, Lucian; Moldovan, Oana Teodora Published: Jul 2021 in Biology DOI: 10.3390/BIOLOGY10070627
109. Accession Number: WOS:000675951200001
110. Development and Characterization of Fe3O4@Carbon Nanoparticles and Their Biological Screening Related to Oral Administration Authors (13): Pop, Daniel; Buzatu, Roxana ... Jivanescu, Anca Published: Jul 2021 in Materials DOI: 10.3390/MA14133556 Accession Number: WOS:000671044500001
111. Marginal Adaptation Assessment for Two Composite Layering Techniques Using Dye Penetration, AFM, SEM and FTIR: An In-Vitro Comparative Study Authors (11): Chisnoiu, Andrea Maria; Moldovan, Marioara ... Pastrav, Mihaela Published: Jun 2021 in Applied Sciences
112. DOI: 10.3390/APP11125657 Accession Number: WOS:000666013500001
113. Visible-light-driven photocatalytic degradation of different organic pollutants using Cu doped ZnO-MWCNT nanocomposites Authors (15): Toloman, Dana; Popa, Adriana ... Pana, Ovidiu
114. Published: Jun 2021 in Journal of Alloys and Compounds DOI: 10.1016/J.JALLCOM.2021.159010 Accession Number: WOS:000630241800060
115. Single-cell Raman micro-spectroscopy for tracking of carotenoids in cyanobacteria exposed to Mn and Zn doped ferrite nanoparticles Authors (4): Nekvapil, Fran; Bunge, Alexander ... Pinzaru, Simona Cinta Published: Jun 2021 in Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy DOI: 10.1016/J.SAA.2021.119607 Accession Number: WOS:000639679500002
116. Graphene-Gold Nanoparticles Nanozyme-Based Electrochemical Sensor with Enhanced Laccase-Like Activity for Determination of Phenolic Substrates Authors (7): Gugoasa, Livia Alexandra Dinu; Pogacean, Florina ... Pruneanu, Stela Published: Jun 2021 in Journal of the Electrochemical Society DOI: 10.1149/1945-7111/AC0C32 Accession Number: WOS:000669980000001
117. Synthesis and characterization of Fe3O4?ZnS:Mn nanocomposites for biomedical applications
118. Authors (10): Stefan, Maria; Leostean, Cristian ... **Barbu-Tudoran, Lucian** Published: May 2021 in Materials Chemistry and Physics DOI: 10.1016/J.MATCHEMPHYS.2021.124474 Accession Number: WOS:000634769200001
119. Biocompatible Magnetic Colloidal Suspension Used as a Tool for Localized Hyperthermia in Human Breast Adenocarcinoma Cells: Physicochemical Analysis and Complex In Vitro Biological Profile Authors (12): Moaca, Elena-Alina; Watz, Claudia-Geanina ... Dehelean,

Cristina-Adriana Published: May 2021 in Nanomaterials DOI: 10.3390/NANO11051189 Accession Number: WOS:000657018800001

120. Synthesis and characterization of Fe@FePt@SiO2@NH2 nanoplatform for amino acids recognition Authors (8): Stegarescu, Adina; Gutoiu, Simona ... Soran, Maria-Loredana Published: Apr 2021 in Journal of Nanoparticle Research DOI: 10.1007/S11051-021-05197-2 Accession Number: WOS:000638864800001
121. Promoting hidden natural design templates in wasted shells of the mantis shrimp into valuable biogenic composite Authors (6): Nekvapil, Fran; Glamuzina, Branko ... Pinzaru, Simona Cinta Published: Apr 2021 in Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy
122. DOI: 10.1016/J.SAA.2020.119223 Accession Number: WOS:000620630600008
123. Adhesion of Flowable Resin Composites in Simulated Wedge-Shaped Cervical Lesions: An In Vitro Pilot Study Authors (10): Banut Onet, Diana; Barbu Tudoran, Lucian ... Soanca, Andrada
124. Published: Apr 2021 in Applied Sciences DOI: 10.3390/APP11073173 Accession Number: WOS:000638368000001
125. Tailoring the RhB removal rate by modifying the PVDF membrane surface through ZnO particles deposition Authors (11): Popa, Adriana; Toloman, Dana ... Pana, Ovidiu Published: Apr 2021 in Journal of Inorganic and Organometallic Polymers and Materials DOI: 10.1007/S10904-020-01795-0 Accession Number: WOS:000582313000001
126. The Morphological and Anatomical Traits of the Leaf in Representative Vinca Species Observed on Indoor- and Outdoor-Grown Plants Authors (7): Ciorita, Alexandra; Tripon, Septimiu Cassian ... Parvu, Marcel Published: Apr 2021 in Plants DOI: 10.3390/PLANTS10040622 Accession Number: WOS:000643517700001
127. Inside Pandora's box: Development of the lethal myrmecopathogenic fungus Pandora formicae within its ant host Authors (4): Csata, Eniko; Billen, Johan ... Marko, Balint Published: Apr 2021 in Fungal Ecology DOI: 10.1016/J.FUNECO.2020.101022 Accession Number: WOS:000624372000004
128. Electrochemical platform for the detection of adenosine using a sandwich - structured molecularly imprinted polymer-based sensor (vol 354, 136656, 2020) Authors (7): Gliga, Laura-Elena; Iacob, Bogdan-Cezar ... Oprean, Radu Published: Jan 2021 in Electrochimica Acta DOI: 10.1016/J.ELECTACTA.2020.137572 Accession Number: WOS:000607619900005
129. Chronic Rhinosinusitis: MALDI-TOF Mass Spectrometry Microbiological Diagnosis and Electron Microscopy Analysis; Experience of the 2nd Otorhinolaryngology Clinic of Cluj-Napoca, Romania Authors (10): Jeican, Ionut Isaia; Tudoran, Lucian Barbu ... Albu, Silviu Published: Dec 2020 in Journal of Clinical Medicine DOI: 10.3390/JCM9123973 Accession Number: WOS:000602100700001
130. Laparoscopic compatible device incorporating inductive proximity sensors for precise detection of gastric and colorectal small tumors Authors (15): Calborean, Adrian; Macavei, Sergiu ... Bintintan, Vasile Published: Dec 2020 in Surgical Oncology DOI: 10.1016/J.SURONC.2020.10.012 Accession Number: WOS:000600212300011

131. Sequential aqueous two-phase system for simultaneous purification of cyanobacterial phycobiliproteins Authors (7): Porav, Alin Sebastian; Bocaneala, Maricel ... Dragos, Nicolae Published: Nov 2020 in Bioresource Technology DOI: 10.1016/J.BIORTECH.2020.123794 Accession Number: WOS:000560718600017
132. Electrochemical platform for the detection of adenosine using a sandwich-structured molecularly imprinted polymer-based sensor Authors (7): Gliga, Laura-Elena; Iacob, Bogdan-Cezar ... Oprean, Radu Published: Sep 2020 in Electrochimica Acta DOI: 10.1016/J.ELECTACTA.2020.136656 Accession Number: WOS:000569142000002
133. Applications of superparamagnetic iron oxide nanoparticles in drug and therapeutic delivery, and biotechnological advancements Authors (7): Suciu, Maria; Ionescu, Corina M. ... **Barbu-Tudoran, Lucian** Published: Jul 2020 in Beilstein Journal of Nanotechnology DOI: 10.3762/BJNANO.11.94 Accession Number: WOS:000552994900001
134. Screen-printed electrodes made on stone paper substrate for uric acid electrochemical detection Authors (5): Varodi, Codruta; Pogacean, Florina ... Pruneanu, Stela Published: Jun 2020 in Studia Chemia DOI: 10.24193/SUBBCHEM.2020.2.19 Accession Number: WOS:000560027700019
135. Stone Paper as a New Substrate to Fabricate Flexible Screen-Printed Electrodes for the Electrochemical Detection of Dopamine Authors (8): Varodi, Codruta; Pogacean, Florina ... Pruneanu, Stela Published: Jun 2020 in Sensors DOI: 10.3390/S20123609 Accession Number: WOS:000553066800001
136. A species on the rise in Europe: Sinodiaptomus sarsi (Rylov, 1923) (Copepoda, Calanoida), a new record for the Romanian crustacean fauna Authors (4): Battes, Karina P.; Vancsa, Eva ... Cimpean, Mirela Published: Jun 2020 in BioInvasions Records DOI: 10.3391/BIR.2020.9.2.17
137. Accession Number: WOS:000531866100017
138. Biomimetic electrochemical sensor for the highly selective detection of azithromycin in biological samples Authors (8): Stoian, Ioan-Adrian; Iacob, Bogdan-Cezar ... Oprean, Radu Published: May 2020 in Biosensors and Bioelectronics DOI: 10.1016/J.BIOS.2020.112098 Accession Number: WOS:000523556800007
139. Structural, morphological and dissolution properties of zro2- based biocomposites for dental applications Authors (6): Bizo, Liliana; Sabo, Klara ... Berar, Antonela Published: Mar 2020 in Studia Chemia DOI: 10.24193/SUBBCHEM.2020.1.11 Accession Number: WOS:000526912600012
140. Multi-analyses of gallstones and correlation between their properties with the laboratory results
141. Authors (10): Peter, Anca; Cozmuta, Leonard Mihaly ... Pop, Flaviu Gheorghe Published: Mar 2020 in Analytical Biochemistry DOI: 10.1016/J.AB.2020.113587 Accession Number: WOS:000523601000012
142. Color-specific porosity in double pigmented natural 3d-nanoarchitectures of blue crab shell Authors (7): Nekvapil, Fran; Pinzaru, Simona Cinta ... Chis, Vasile Published: Feb 2020 in Scientific Reports DOI: 10.1038/S41598-020-60031-4 Accession Number: WOS:000563079900003

C3

D. Lucrări publicate în ultimii 10 anii în reviste şi volume de conferinţe cu referenţi (neindexate)

- Reviste

D1.

- Selecţie cu maximum 20 lucrări în volume de conferinţe

1.

E. Brevete obţinute în întreaga activitate

E1.

Data: 01.07.2025 **Semnătura:**

E – Brevete (pentru întreaga activitate)

A N E X A 4 . 1

Nume Prenume: **Chelaru Julieta Daniela**
Gradul didactic: conferentiar

Instituția unde este titular: Universitatea Babeș-Bolyai

Facultatea: de Chimie și Inginerie Chimică
Departamentul: Inginerie Chimică

L I S T A
lucrărilor ştiinţifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

Doctorat in Ingineria Materialelor - "Contribuţii la studiul degradării şi conservării bronzurilor turnate din operele de artă"

B. Cărţi si capitole în cărţi publicate în ultimii 10 ani

B1. Elemente de Inginerie Mecanică: Mecanica și Rezistența Materialelor

C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani

C1.

1. **Julieta Daniela Chelaru**, Liana-Maria Muresan, Lucian Barbu, Simona Pinzaru, Tudor-Liviu Tamas, Koloszi Tibor, Characterization of the corrosion products formed on Michael the Brave's equestrian statue in urban atmosphere, Materials today communications, **2022,** DOI: 10.1016/j.mtcomm.2022.103565, WOS:000802775400002, **FI = 3,662**
2. Nicoleta Cotolan; Graziella Liana Turdean, **Julieta Daniela Chelaru**, Improving the corrosion resistance of mild steel by zinc-graphene oxide coatings, Studia Universitatis Babes-Bolyai, Chemia,65,3,**2020, DOI**: 10.24193/subbchem.2020.3.02, **WOS**: 000581042000003, **FI = 0,447**.
3. **Julieta Daniela Chelaru**, Mihaela Ciobra, Liana Maria Mureşan, Inhibition effect of some commercial corrosion inhibitors on mild steel in 7.0 m phosphoric acid, Studia Universitatis Babes-Bolyai, Chemia,65,1,**2020,** DOI: 10.24193/subbchem.2020.1.02, WOS: 000526912600003, **FI = 0,447.**
4. **Julieta Daniela Chelaru**, Liana Maria Mureşan, Study of S235 steel corrosion process in wastewater from the petrochemical industry, Studia Universitatis Babeş-Bolyai, Chemia,64,2, Tom II,323-333,**2019,** DOI: 10.24193/subbchem.2019.2.27, WOS: 000484542200003, **FI = 0,494**.
5. **Julieta Daniela Chelaru**, Liana Maria Mureşan, Corrosion inhibitors for bronze covered with synthetic golden patina,Rev. Roum. Chim,63,1,73-81,**2018,** WOS: 000439133900010, **FI = 0,275**.
6. **Julieta Daniela Chelaru**, Dovran Aylakov, Liana Maria Mureşan, Corrosion inhibition of low carbon steel in simulated wastewater from petroleum industry, Studia Universitatis Babes-Bolyai, Chemia,62,**2017,** DOI: 10.24193/subbchem.2017.4.30, WOS: 000425964800031, **FI = 0,305**.
7. **Julieta Daniela Chelaru**, Firuta Goga, Maria Gorea, Corrosion and mechanical properties and microstructure of cement mortar containing calcium sulphate waste, Studia Universitatis Babes-Bolyai, Chemia, 62, **2017,** DOI: 10.24193/subbchem.2017.2.21, WOS: 000417263800009, **FI= 0,305**.

8. **Julieta Daniela Chelaru**, Calin I. Anghel, Maria Gavriloae, Liana Maria Mureşan, **2017**, Electrochemical and meta-modelling analysis of the inhibiting effect exerted by sulfuric acid diamide on bronze corrosion, Revue Roumaine de Chimie, 62, 49 – 56, **WOS:** 000395957100007, **FI = 0,4**.
9. **Julieta Daniela Chelaru**, Maria Gavriloae, Liana Maria Mureşan, **2016**, Electrochemical investigation of the inhibiting effect exerted by the suphuric acid diamide on bronze corrosion, Studia UBB Chemia, 3, Tom I, 125 – 134, WOS: 000393577300014, FI = 0,244.
10. Tiberiu Alexandru Antal, **Julieta Daniela Chelaru**, A multithreaded java client-server model for robot interaction, Acta Technica Napocensis-Series: Applied Mathematics, Mechanics, and Engineering,60,3,**2017**.
11. **Julieta Daniela Chelaru**, Maria Gorea, Evaluation of Corrosion in Steel Reinforced Concrete with Brick Waste, International Journal of Materials and Metallurgical Engineering,15,8,176-180,**2021**.
12. **Julieta Daniela Chelaru**, Lucian Barbu – Tudoran, Liana Maria Mureşan, **2015**, The effectiveness of wax in protection of bronzes covered with artificial patina in outdoor exposure, Studia UBB Chemia, 3, vol. 60, 151 - 162.

D. Lucrări publicate în ultimii 10 anii în reviste şi volume de conferinţe cu referenţi (neindexate)

D1. **- Selecţie cu maximum 20 lucrări în volume de conferinţe**

1. **Julieta Daniela Chelaru**, Maria Oana Felecan, The study of the corrosion zinc-nickel coated ST2 stainless steel, MACHINES. TECHNOLOGIES. MATERIALS. vol 3, 2023
2. Liliana Bizo, Klara Magyari, **Julieta Daniela Chelaru**, Ovidiu Nemeş, Comparative study of structural and optical properties of zirconium-doped indium oxide synthesized by solid state reactions and sol-gel technique, Powder Metallurgy and Advanced Materials: RoPM&AM 2017,8,167,**2018**.
3. Julieta Daniela Chelaru, Maria Gorea, Evaluation of Corrosion in Steel Reinforced Concrete with Brick Waste, 15th International Conference on Corrosion Engineering, Control and Protection, 16-17 August 2021 Barcelona, Prezentare orala.
4. BIZO LILIANA-ANTONELA, MAGYARI KLARA DOROTTYA, CHELARU JULIETA DANIELA, Nemes Ovidiu, Comparative study of structural and optical properties of zirconium-doped indium oxide synthesized by solid state reactions and sol-gel technique, 5th International Conference on Powder Metallurgy and Advanced Materials, 17-20 September 2017, Cluj-Napoca, Romania. Poster.

E. Brevete obţinute în întreaga activitate

E1. -

Data: 01.07.2025 **Semnătura:**

E – Brevete (pentru întreaga activitate)

A N E X A 4 . 1

Nume Prenume: **Fogarasi Szabolcs**
Gradul didactic: Conferențiar universitar
Instituția unde este titular: Universitatea „Babeș-Bolyai”
Facultatea: Chimie şi Inginerie Chimică
Departamentul: Inginerie Chimică

L I S T A
lucrărilor ştiinţifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

Doctor în Inginerie Chimică al Universității „Babeș-Bolyai”.
Titlul tezei: Recuperarea aurului şi argintului din deșeuri de plăci de circuite imprimate.
(https://doctorat.ubbcluj.ro/ro/sustinerile-publice-ale-tezelor-de-doctorat/?an=2012&luna=0&facultate=3&domeniu=2)
Conducător științific: Prof. dr. ing. Petru Ilea.
Titlul a fost acordat în baza ordinului Ministerul Educației, Cercetării, Tineretului și Sportului din România Nr. 6508 din 19.12.2012.

B. Cărţi si capitole în cărţi publicate în ultimii 10 ani

1. Barbu-Radu-Horațiu Mișca, **Szabolcs Fogarasi**, Îndrumător pentru lucrări practice la disciplina transfer termic și aparate termice, 2015, Presa Universitară Clujeană, Cluj-Napoca, Romania. p. 165. ISBN 978-973-595-844-2.

C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani

1. **Fogarasi, S.**; Imre-Lucaci, F.; Dragan, S.; Imre-Lucaci, A. Evaluation of mass transfer parameters for urea dissolution in fixed-bed with downward flow of water. *Studia Universitatis Babeș-Bolyai Chemia* **2016**, *LXI*, 495-504.
2. **Fogarasi, S.**; Imre-Lucaci, F.; Ghirisan, A.; Mişca, B.R.H.; Imre-Lucaci, A. Removal of lead from industrial wastewater by electrocoagulation using sacrificial aluminium electrodes. *Studia Universitatis Babeș-Bolyai Chemia* **2016**, *LXI*, 145-154.
3. **Fogarasi, S.**; Nagy, M.; Imre-Lucaci, F.; Imre-Lucaci, A. Identification of mass transfer parameters for rock salt dissolution in a plug flow system. *Studia Universitatis Babes-Bolyai Chemia* **2017**, *62*, 175-182, doi:10.24193/subbchem.2017.1.15.
4. Imre-Lucaci, Á.; Nagy, M.; Imre-Lucaci, F.; **Fogarasi, S.** Technical and environmental assessment of gold recovery from secondary streams obtained in the processing of waste printed circuit boards. *Chemical Engineering Journal* **2017**, *309*, 655-662, doi:10.1016/j.cej.2016.10.045.
5. Fogarasi, M.; Socaci, S.A.; **Fogarasi, S.;** Jimborean, M.; Pop, C.; Tofană, M.; Rotar, A.; Tibulca, D.; Salagean, D.; Salanta, L. Evaluation of biochemical and microbiological changes

occurring in fresh cheese with essential oils during storage time. *Studia Universitatis Babes-Bolyai Chemia* **2019**, *64*, 527-537, doi:10.24193/subbchem.2019.2.45.

6. **Fogarasi, S.;** Imre-Lucaci, F.; Fogarasi, M.; Imre-Lucaci, A. Technical and environmental assessment of selective recovery of tin and lead from waste solder alloy using direct anodic oxidation. *Journal of Cleaner Production* **2019**, *213*, 872-883, doi:10.1016/j.jclepro.2018.12.101.
7. Fogarasi, M.; Diaconeasa, Z.M.; Pop, C.R.; **Fogarasi, S.;** Semeniuc, C.A.; Fărcaş, A.C.; Ţibulcă, D.; Sălăgean, C.-D.; Tofană, M.; Socaci, S.A. Elemental Composition, Antioxidant and Antibacterial Properties of Some Wild Edible Mushrooms from Romania. *Agronomy* **2020**, *10*, 1972, doi:10.3390/agronomy10121972.
8. Tibulca, D.; Fogarasi, M.; Socaci, S.A.; **Fogarasi, S.;** Pop, C.; Salagean, D.; Tofană, M.; Michiu, D. Effect of agaricus bisporus and origanum majorana l extract on the shelf-life and nutritional properties of pork liver pÂtÉ. *Studia Universitatis Babes-Bolyai Chemia* **2020**, *65*, 197-208, doi:10.24193/subbchem.2020.2.16.
9. Bains, A.; Chawla, P.; Kaur, S.; Najda, A.; Fogarasi, M.; **Fogarasi, S.** Bioactives from Mushroom: Health Attributes and Food Industry Applications. *Materials* **2021**, *14*, 7640, doi:10.3390/ma14247640.
10. Fogarasi, M.; Socaciu, M.-I.; Sălăgean, C.-D.; Ranga, F.; Fărcaș, A.C.; Socaci, S.A.; Socaciu, C.; Ţibulcă, D.; **Fogarasi, S.;** Semeniuc, C.A. Comparison of Different Extraction Solvents for Characterization of Antioxidant Potential and Polyphenolic Composition in Boletus edulis and Cantharellus cibarius Mushrooms from Romania. *Molecules* **2021**, *26*, 7508, doi:10.3390/molecules26247508.
11. Akhone, M.A.; Bains, A.; Tosif, M.M.; Chawla, P.; Fogarasi, M.; **Fogarasi, S.** Apricot Kernel: Bioactivity, Characterization, Applications, and Health Attributes. *Foods* **2022**, *11*, doi:10.3390/foods11152184.
12. Chandak, A.; Dhull, S.B.; Chawla, P.; Fogarasi, M.; **Fogarasi, S.** Effect of Single and Dual Modifications on Properties of Lotus Rhizome Starch Modified by Microwave and gamma-Irradiation: A Comparative Study. *Foods* **2022**, *11*, doi:10.3390/foods11192969.
13. Jayaprakash, G.; Bains, A.; Chawla, P.; Fogarasi, M.; **Fogarasi, S.** A Narrative Review on Rice Proteins: Current Scenario and Food Industrial Application. *Polymers (Basel)* **2022**, *14*, doi:10.3390/polym14153003.
14. Kumari, P.; Raju, D.V.S.; Prasad, K.V.; Saha, S.; Panwar, S.; Paul, S.; Banyal, N.; Bains, A.; Chawla, P.; Fogarasi, M.; **Fogarasi, S.** Characterization of Anthocyanins and Their Antioxidant Activities in Indian Rose Varieties (Rosa x hybrida) Using HPLC. *Antioxidants* **2022**, *11*, doi:10.3390/antiox11102032.
15. Shashikant, M.; Bains, A.; Chawla, P.; Fogarasi, M.; **Fogarasi, S.** The Current Status, Bioactivity, Food, and Pharmaceutical Approaches of Calocybe indica: A Review. *Antioxidants* **2022**, *11*, doi:10.3390/antiox11061145.
16. Thapa, A.; Kaushik, R.; Arora, S.; Jaglan, S.; Jaswal, V.; Yadav, V.K.; Singh, M.; Bains, A.; Chawla, P.; Khan, A.; Fogarasi, M.; **Fogarasi, S.** Biological Activity of Picrorhiza kurroa: A Source of Potential Antimicrobial Compounds against Yersinia enterocolitica. *International journal of molecular sciences* **2022**, *23*, doi:10.3390/ijms232214090.
17. Fogarasi, M.; Urs, M.J.; Socaciu, M.I.; Ranga, F.; Semeniuc, C.A.; Vodnar, D.C.; Muresan, V.; Tibulca, D.; **Fogarasi, S.;** Socaciu, C. Polyphenols-Enrichment of Vienna Sausages Using Microcapsules Containing Acidic Aqueous Extract of Boletus edulis Mushrooms. *Foods* **2024**, *13*, doi:10.3390/foods13070979.

D. Lucrări publicate în ultimii 10 anii în reviste şi volume de conferinţe cu referenţi

E. Brevete obţinute în întreaga activitate

Data: 01.07.2025 **Semnătura:**

E – Brevete (pentru întreaga activitate)

A N E X A 4 . 1

Nume Prenume: **Gaina Ioana Luiza**

Gradul didactic: Conferentiar

Instituția unde este titular: Universitatea Babeș-Bolyai

Facultatea: Facultatea de Chimie si Inginerie Chimica

Departamentul: Chimie

L I S T A
lucrărilor ştiinţifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

„Sinteza de noi derivati fenotiazinici precursori in sinteza de materiale cu proprietati fizice neconventionale" sustinuta in 2001

2. Teza de abilitare

Heterocyclic compounds; Green synthetic approaches, biomedical and nanomaterials applications

3. Cărţi si capitole în cărţi publicate în ultimii 10 ani

Nu

4. Lucrări indexate ISI/BDI publicate în ultimii 10 ani : 44 lucrari indexate wos

1. Stefan Richter, Peter Lönnecke, Dijana Bovan, Nicoleta Andrian, Bianca Stoean, Maria Lehene, Radu Silaghi-Dumitrescu, **Luiza Gaina**, Sanja Mijatović, Danijela Maksimović-Ivanić, Goran N. Kaluđerović, Evamarie Hey-Hawkins. Platinum(II/IV) complexes with N-substituted carboxylate ethylenediamine / propylenediamine ligands: preparation, characterization and in vitro activity. Dalton Trans. 2025. https://doi.org/10.1039/D4DT03041A IF 3.5 cit 0

2. A. Majdoub, M. Majdoub, **L. Gaina**, F. Khalil, H. Zaitan. Cotton fabric coated with graphene oxide nanosheets and CuO nanoparticles as a "dip catalyst" for the photocatalytic degradation of dyes. Colloids and Surfaces A: Physicochemical and Engineering Aspects 705 (2025) 135670. https://doi.org/10.1016/j.colsurfa.2024.135670 cit 0 IF 4.9

3. A. Grozav*, T. Cheminel, A. Jurj, O. Zanoaga, L. Ruduly, C. Braicu, I. Berindean-Neagoie, O. Crisan, **L. Gaina***, B. Therrien*. Arene Ruthenium Complexes Specifically Inducing Apoptosis in Breast Cancer Cells. Inorganics 2024, 12(11), 287, https://doi.org/10.3390/inorganics12110287 IF 3.1 cit 0

4. B. Brem, B. Stoean (Vasile), E. Molnar, E. Fischer-Fodor, O. Balacescu, R. Borlan, M. Focsan, A. Grozav, P. Achimas-Cadariu, E. Gal*, **L. Gaina***. Meso-substituted AB3-type phenothiazinyl-porphyrins and their indium and zinc complexes photosensitizing properties, cytotoxicity and phototoxicity on ovarian cancer cells. RSC Med. Chem., 2024, https://doi.org/10.1039/D4MD00601A IF 4.1

5. M. Gal, **L. Gaina**, T. Lovasz, E. Gal, AM. Craciun, M. Focsan, A. Turza, D. Rugina, D A.M.V. Brânzanic, S. Pesek, R. Silaghi-Dumitrescu, C. Cristea. Sonochemical synthesis, optical properties and DFT studies on novel (N-arylamino)phenothiazinium dyes suitable for fluorescence cells imaging. Spectrochimica Acta part A-Molecular and Biomolecular Spectroscopy, 2024, 322, 124768. DOI10.1016/j.saa.2024.124768. IF 4.3 cit 2

6. B. Stoean, M. Lehene, C. Zagrean-Tuza, R. Silaghi-Dumitrescu, C. Cristea, **L. Gaina***. Transient radical species and oxygen colorimetric indicators grounded on phenothiazinium dyes. Spectrochimica Acta part A-Molecular and Biomolecular Spectroscopy, 2024, 320, 124602. DOI 10.1016/j.saa.2024.124602 IF 4.3 cit 2

7. R. Bouzammit, S. Belchkar, M. El Fadili, Y. Kanzouai, N. Aflak, M. Chalkha, L. Bahsis, A. Nakkabi, M. Bakhouch, E. Gal, **L. Gaina**, G. Al Houari. Synthesis, Characterization, DFT mechanistic study, Antibacterial Activity, Molecular modeling, and ADMET properties of novel chromone-isoxazole hybrids. Journal of Molecular Structure 2024, 1314, 138770. DOI10.1016/j.molstruc.2024.138770
IF 4.0 cit 2

8. R. Bouzammit, S. Belchkar, M. El Fadili, Y. Kanzouai, S. Mujwar, MM. Alanazi, M. Chalkha, A. Nakkabi, M. Bakhouch, E. Gal, **L. Gaina**, G. Al Houari.
New Triazole-Isoxazole Hybrids as Antibacterial Agents: Design, Synthesis, Characterization, In Vitro, and In Silico Studies. Molecules 2024, 29(11), 2510. DOI 10.3390/molecules29112510 IF 4.2 cit 1

9. B. Stoean, I. Lupan, C. Cristea, M. Silion, L. Silaghi-Dumitrescu, R. Silaghi-Dumitrescu, L. **Gaina***, Outcomes of folic acid esterification upon the properties of hydrophilic phenothiazinium dyes: New photosensitizers for antimicrobial photodynamic therapy. Journal of Photochemistry and Photobiology A: Chemistry 2024, 451, 115500, https://doi.org/10.1016/j.jphotochem.2024.115500 IF 4.1, cit 3

10. M. Zetes, A.M. Hada, M. Todea, **L. Gaina**, S. Astilean, A.M. Craciun. Dual-emissive solid-state histidine-stabilized gold nanoclusters for applications in white-light generation. Nanoscale Advances, 2023, 5(21), 5810-5818 https://doi.org/10.1039/D3NA00555K IF 4.6, cit 2

11. M. Gal, C. Cristea, A. M. Craciun, A. Turza, L. Barbu-Tudorandl, B. Brem, T. Lovasz, L. Silaghi-Dumitrescu, **L. Gaina***. New fluorescent electrospun polymer materials containing phenothiazinyl carboxylate metal salts for versatile latent fingerprint detection. Dyes and Pigments 2023, 111085. https://doi.org/10.1016/j.dyepig.2023.111085 IF 4.1 cit 3

12. M. Gal, A. Turza, B. Stoean, **L. Gaina**, C. Cristea, E. Gal, T. Lovasz, D. Porumb, L. Silaghi-Dumitrescu. Alternative procedures for the green synthesis of 3,7-bis(N,N-

(2hydroxyethyl)amino)phenothiazinium dye. Studia Universitatis Babes-Bolyai Chemia 2022, 67(4), 303-314 DOI10.24193/subbchem.2022.4.20 IF 0.5, cit 2

13. B. Stoean, **L. Gaina**, C. Cristea, R. Silaghi-Dumitrescu, A. M.V.Branzanic, M. Focsan, E. Fischer-Fodor, B.Tigu, C. Moldovan, A. D. Cecan, P. Achimas-Cadariu, S. Astilean, L. Silaghi-Dumitrescu. New methylene blue analogues with N-piperidinyl-carbinol units: Synthesis, optical properties and in vitro internalization in human ovarian cancer cells. Dyes and Pigments 205, 2022, 110460. https://doi.org/10.1016/j.dyepig.2022.110460 IF 4.1, cit 10

14. E. Gal, B. Brem, **L. Gaina**, A.M. Craciun, C. Cristea, L. Silaghi-Dumitrescu. Optical properties of new 5- (phenothiazinyl)methylidenebarbituric acid derivatives. Journal of Molecular Structure 1247 (2022) 131334. https://doi.org/10.1016/j.molstruc.2021.131334 IF 4 cit 1

15. M. Gal, C. Cristea, T. Lovasz, A.M. Craciun, A. Turza, D. Porumb, E. Gal, G. Katona, L. Silaghi-Dumitrescu, **L. Gaina***. New fluorescent phenothiazine carboxylates for fluorescent nanomaterials. Journal of Molecular Structure 1246 (2021) 131174. https://doi.org/10.1016/j.molstruc.2021.131174 IF 4, cit 3

16. R. Borlan, D. Stoia, **L. Gaina**, A. Campu, G. Marc, M. Perde-Schrepler, M. Silion, D. Maniu, M. Focsan, S. Astilean. Fluorescent Phthalocyanine-Encapsulated Bovine Serum Albumin Nanoparticles: Their Deployment as Therapeutic Agents in the NIR Region. Molecules 2021, 26, 15, 4679. https://doi.org/10.3390/molecules26154679 If 4.2 cit 11

17. R. Borlan, M. Focsan, M. Perde-Schrepler, O. Soritau, A. Campu, **L. Gaina**, E. Pall, B. Pop, O. Baldasici, C. Gherman, D. Stoia, D. Maniu, S. Astilean. Antibody-functionalized theranostic protein nanoparticles for the synergistic deep red fluorescence imaging and multimodal therapy of ovarian cancer. Biomaterials Science, 2021, 9, 6183-6202. https://doi.org/10.1039/D1BM01002F IF 5.8 cit 6

18. M. Nistor, M. Focsan, **L. Gaina**, M. Cenariu, A. Pintea, C. Socaciu, D. Rugina. Real-time fluorescence imaging of anthocyanins complexed with diphenylboric acid 2-aminoethyl inside B16–F10 melanoma cells. Phytochemistry 189 (2021) 112849. https://doi.org/10.1016/j.phytochem.2021.112849 IF 3.2 cit 3

18. B. Stoean, D. Rugina, M. Focsan, AM.Craciun, M. Nistor, T. Lovasz, A. Turza, D. Porumb, E. Gal, C. Cristea, L. Silaghi-Dumitrescu, S. Astilean, **L. Gaina***. Novel (Phenothiazinyl)Vinyl-Pyridinium Dyes and Their Potential Applications as Cellular Staining Agents. International Journal of Molecular Sciences 2021, 22(6), 2985. https://doi.org/10.3390/ijms22062985 IF 4.9 cit 9

20. B. Stoean, **L. Gaina**, E. Gal, C. Cristea, T. Lovasz, Silaghi-Dumitrescu L. Examination of (phenothiazinyl)vinyl-pyridinium dye's capacity of interaction with DNA, Studia Universitatis Babes-Bolyai Chemia, 2021, 66(1), 59-66. DOI 10.24193/subbchem.2021.2.05 IF 0.5 cit 1

21. E. Gal, **L. Gaina**, H. Petkes, Al. Pop, C. Cristea, G. Barta, D.C. Vodnar, L. Silaghi-Dumitrescu. Ultrasound-assisted Strecker synthesis of novel 2-(hetero)aryl-2-(arylamino)acetonitrile derivatives. Beilstein Journal of Organic Chemistry 2020, 16, 2929-2936. https://doi.org/10.3762/bjoc.16.242. IF 2.2 Cit 2

22. E. Molnar, E. Gal, **L. Gaina**, C. Cristea, L. Silaghi-Dumitrescu. Ethyne functionalized meso-phenothiazinyl-phenyl-porphyrins: synthesis and optical properties of free base versus protonated species. Molecules 2020, 25(19), 4546. https://doi.org/10.3390/molecules25194546. IF 4.2 cit 3

23. E. Molnar, E. Gal, **L. Gaina**, C. Cristea, E. Fischer-Fodor, M. Perde-Schrepler, P. Achimas-Cadariu, M. Focsan, L. Silaghi-Dumitrescu. Novel Phenothiazine-Bridged Porphyrin-(Hetero)aryl dyads: Synthesis, Optical Properties, In Vitro Cytotoxicity and Staining of Human Ovarian Tumor Cell Lines. International Journal of Molecular Sciences 2020, 21(9), 3178. https://doi.org/10.3390/ijms21093178. IF 4.9 Cit 10

24. A. I. Pricopie, M. Focsan, I. Ionut, G. Marc, L. Vlase, **L. Gaina**, D. C. Vodnar, E. Simon, G. Barta, A. Pirnau, O. Oniga. Novel 2,4-Disubstituted-1,3-Thiazole Derivatives: Synthesis, Anti-Candida Activity Evaluation and Interaction with Bovine Serum Albumine. Molecules 2020, 25, 1079. https://doi.org/10.3390/molecules25051079. IF 4.2 cit 17

25. S. Varvara, G. Caniglia, J. Izquierdo, R. Bostan, **L. Gaina**, R.M. Souto. Multiscale electrochemical analysis of the corrosion control of bronze in simulated acid rain by horse-chestnut (Aesculus hippocastanum L.) extract as green inhibitor. Corrosion Science 2020, 165, 108381. https://doi.org/10.1016/j.corsci.2019.108381. IF 7.4 cit 46

26. S. Varvara, R. Bostan, M. Popa, **L. Gaina**, F. Popa. Doxepin as Corrosion Inhibitor for Copper in 3.5 Wt. % NaCl Solution. Studia Universitatis Babes-Bolyai Chemia 2020, 65, 3, 125-226. https://doi.org /10.24193/subbchem.2020.3.17. IF 0.5 cit 2

27. A.I. Pricopie, I. Ionuț, G. Marc, A.M. Arseniu, L. Vlase, A. Grozav, **L. Gaina**, D. C. Vodnar, A. Pirnau, B. Tiperciuc, O. Oniga. Design and Synthesis of Novel 1,3-Thiazole and 2-Hydrazinyl-1,3-Thiazole Derivatives as Anti-Candida Agents: In Vitro Antifungal Screening, Molecular Docking Study, and Spectroscopic Investigation of their Binding Interaction with Bovine Serum Albumin. Molecules 2019, 24, 3435. https://doi.org /10.3390/molecules24193435. IF 4.2 cit 34

28. A.F. Szoke, G.S., Szabo, Z. Horvolgyi, E. Albert, **L.Gaina**, L. M. Muresan Eco-friendly indigo carmine-loaded chitosan coatings for improved anti-corrosion protection of zinc substrates. Carbohydrate Polymers 2019, 215 (1) 63-72. doi.org/10.1016/j.carbpol.2019.03.077. IF 10.7 cit 48

29. R. Sisa, B. Brem, E. Gal, **L. Gaina**, D. Porumb, C. Cristea, L. Silaghi-Dumitrescu. Optical properties modulation of cyanine dyes in organic solvents and in the critical intracellular pH window. Studia Universitatis Babes-Bolyai Chemia 2019, 64(2), 547-553. https://doi.org/ 10.24193/subbchem.2019.2.47. IF 0.5 cit 7

30. A. Starukhin, A. Gorski, T. Pavich, V. Kniukshto, **L. Gaina**. Creation of chemically conjugated multichromophoric complexes based on meso-substituted metalloporphyrins. XIII International Workshop on Quantum Optics (IWQO-2019), Book Series: EPJ Web of Conferences, 2019, 220, 03030. https://doi.org/ 10.1051/epjconf/201922003030. IF 0 Cit 3

31. S. Varvara, **L. Gaina**, R. Bostan, F. Popa, A. Grozav. Some phenothiazinyl-thiazolyl-hydrazine derivatives as corrosion inhibitors for carbon steel in 1.0 M HCl: Electrochemical, SEM-EDX and DFT

investigations. International Journal of Electrochemical Science, 2018, 13, 8338-8364. https://doi.org/10.20964/2018.09.32. IF 1.3 cit 3

32. B. Brem, Q. Colange, E. Gal, D. Porumb, C. Cristea, **L.Gaina**, T. Lovasz, L. Silaghi-Dumitrescu (Phenothiazinyl) vinyl-indolium cationic dyes. Studia Universitatis Babes-Bolyai Chemia 2018, 63(2), 117-123. https://doi.org/10.24193/subbchem.2018.2.11. IF 0.5 Cit 1

33. S. Varvara, R. Bostan, O. Bobis, **L. Gaina**, F. Popa, V. Mena, R. M. Souto. Propolis as a green corrosion inhibitor for bronze in weakly acidic solution. Applied Surface Science, 2017, 426C, 1100-1112. https://doi.org/10.1016/j.apsusc.2017.07.230. IF 6.3 cit 77

34. R. Bostan, S. Varvara, **L. Gaina**, T. Petrisor Jr., L. M. Muresan, Protective effect of inhibitor-containing nitrocellulose lacquer on artificially patinated bronze. Progress in Organic Coatings, 2017, 111C, 416-427, https://doi.org/10.1016/j.porgcoat.2016.08.004. IF 6.5 Cit 14

35. B. Brem, E. Gal, **L. Gaina**, L. Silaghi-Dumitrescu, E. Fischer-Fodor, C. I. Tomuleasa, A. Grozav, V. Zaharia, L. Filip, C. Cristea. Novel Thiazolo [5,4-b] phenothiazine Derivatives: Synthesis, Structural Characterization, and In Vitro Evaluation of Antiproliferative Activity against Human Leukaemia. International Journal of Molecular Sciences 2017, 18(7), 1365; https://doi.org/10.3390/ijms18071365. IF 4.9 cit 15

36. A. Grozav, I.D. Porumb, **L. Gaina***, L. Fililip*, D. Hanganu. Cytotoxicity and Antioxidant Potential of Novel 2-(2-((1H-indol-5yl)methylene)-hydrazinyl)-thiazole Derivatives. Molecules 2017, 22(2), 260. https://doi.org/ 10.3390/molecules22020260. IF 4.2 cit 53

37. A.M. Craciun, M. Focsan, **L. Gaina**, S. Astilean. Enhanced one- and two-photon excited fluorescence of cationic (phenothiazinyl)vinyl-pyridinium chromophore attached to polyelectrolyte-coated gold nanorods. Dyes and Pigments 2017, 136, 24-30. https://doi.org/10.1016/j.dyepig.2016.08.033. IF 4.1, cit 10

38. B. Brem, E. Gal, **L. Gaina**, T. Lovasz, E.A. Molnar, D. Porumb, C. Cristea. Novel 1,9-diacyl-5-(phenothiazinyl)dipyrromethane dialkyltin complexes. Studia Universitatis Babes-Bolyai Chemia 2016, 61(3), 73-80. Cit 1 IF 0.5

39. A. Starukhin, A. Gorski, V. Knyukshto, A. Panarin, T. Pavich, **L. Gaina**, E. Gal. Photophysical study of meso-phenothiazinyl-porphyrins metallocomplexes
11th International Symposium on Photon Echo and Coherent Spectroscopy (PECS) Location: Svetlogorsk, Rusia, SEP 16-21, 2017. XI International Symposium on Photon Echo and Coherent Spectroscopy (PECS-2017) Book Series: EPJ Web of Conferences 2017, 161, UNSP 03017. https://doi.org/10.1051/epjconf/201716103017.

40. E. Gal, **L. Gaina**, C. Cristea, V. Munteanu, L. Silaghi-Dumitrescu. The influence of bonding topology on the electronic properties of new Schiff bases containing phenothiazine building blocks, Journal of Electroanalytical Chemistry 2016, 770, 14-22. https://doi.org/10.1016/j.jelechem.2016.03.019. IF 4.1Cit 12

418. B. Brem, E. Gal, **L. Gaina**, C. Cristea, A M Gabudean S. Astilean, L. Silaghi-Dumitrescu. Metallo complexes of meso-phenothiazinylporphyrins: Synthesis, Linear and nonlinear optical properties. Dyes and Pigments 2015, 123, 386-395. https://doi.org/10.1016/j.dyepig.2015.08.021. IF 4.1 Cit 19

42. B. Brem, E. Gal, C. Cristeaa, **L. Gaina**, A. Grozav, V. Zaharia, L. Silaghi-Dumitrescu. Synthesis of new benzothiazolyl-phenothiazine derivatives. Studia Universitatis Babes-Bolyai Chemia, 2015, 60(2), 371-378. IF 0.5 cit 3

43. B. Brem, E. Gal, T. Lovasz, C. Cristea**, L. Gaina**, L. Silaghi-Dumitrescu. Assessments of electronic properties in phenothiazine carbaldehyde regioisomers series. Studia Universitatis Babes-Bolyai Chemia, 2015, 60(2), 271-279. IF 0.5 Cit 2

44. I. H. Filip, E. Gál, I. Lupan, M. Perde-Schrepler, P. Lönnecke, M. Surducan, **L. Gaina**, E. Hey-Hawkins and L. Silaghi-Dumitrescu, Tuning the coordination properties of phenothiazine by regioselective introduction of diphenylphosphanyl groups, Dalton Transactions. 2015, 44, 615–629. https://doi.org/10.1039/c4dt02665a. IF 3.5 cit 9

5. Lucrări publicate în ultimii 10 anii în reviste şi volume de conferinţe cu referenţi (neindexate)

- Reviste

1.

- Selecţie cu maximum 20 lucrări în volume de conferinţe

2.

E. Brevete obţinute în întreaga activitate

3.

Nota: Datele sunt preluate din Baza de date Managementul Cercetarii si prezentate in extenso in Anexa Indicatori de calitate pe 10 ani.

Data:
01.07.2025

Semnătura: Găină Ioana Luiza

A N E X A 4 . 1

Nume Prenume: **László Zoltán**
Gradul didactic: Conferențiar universitar

Instituția unde este titular: Universitatea „Babeș-Bolyai”

Facultatea: Biologie și Geologie
Departamentul: Biologie Moleculară și Biotehnologie

LISTA
lucrărilor ştiinţifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

László Zoltán, “Cercetări asupra insectei galicole *Diplolepis rosae* (Hymenoptera, Cynipidae) și a comunității parazitice legată de gala”. Universitatea din Debrecen, Facultatea de Științele Naturii, Școala Doctorală de Științele Mediului, Programul de ecologie terestră, Coordonator științific: Dr. Prof. Tóthmérész Béla, Șef de catedră, Universitatea din Debrecen, Catedra de Ecologie, Debrecen, Ungaria, 2007.

B. Cărţi si capitole în cărţi publicate în ultimii 10 anii

1. **László Z.** (2017) A study on Diplolepis rosae (Hymenoptera, Cynipidae) and its community [in Hungarian with an English summary] pp. 108, Presa Universitara Clujeana, http://www.editura.ubbcluj.ro/bd/ebooks/pdf/2067.pdf

C. Lucrări indexate ISI/BDI publicate în ultimii 10 anii

1. Lakatos, T., Báldi, A., Benkő, Z., Gallé, R., Korányi, D., Kovács, I., **László, Z.**, Purger, J.J., Sándor, K., Seress, G., Urák, I. & Batáry, P. (2025). Landscape complexity and edge effects shape bird community composition and filter functional traits in villages. Ecological Indicators, 176, 113644.
2. Péter, Á., Beke, B., **László, Z.**, Hornok, S., & Sándor, A. D. (2025). Contrasting effects of body condition on ectoparasite abundance in a social bat: different roles of season and host sex. International Journal for Parasitology.
3. **László, Z.**, Looney, C., Prázsmári, H., Poor, E., & Shorthouse, J. D. (2024). The cynipid gall wasp Diplolepis rosae is more successful in North America than in Europe because of enemy release. Insect Conservation and Diversity, 17(5), 800-810.
4. **László, Z.**, Szilágyi, B., Macalik, B., Biró, M., Iordache, C. T., Nicula, M., & Podar, D. (2024). Successful gall induction on wild roses by gall wasps under lab conditions. Ecological Entomology.

5. **László Z.**, Kelemen T.-I., Japoshvili G. (2022) Pteromalidae of Lagodekhi Protected Areas with the description of a new Psilocera species from Sakartvelo (Georgia). Acta Zoologica Academiae Scientiarum Hungaricae 68(1): 53-72. https://doi.org/10.17109/AZH.68.1.53.2022
6. Zhu Q., Looney C., Chen T., Cuesta-Porta V., **László Z.**, Wang Y., Pujade-Villar J. (2021) A new species of Diplolepis Geoffroy (Hymenoptera: Cynipidae: Diplolepidini) from northeastern China. Zootaxa. 4985 (2): 219–234. https://doi.org/10.11646/zootaxa.4985.2.5
7. **László Z.**, Lakatos K.T., Dénes A.-L. (2021) A new species of Mesopolobus (Hymenoptera, Pteromalidae) from black locust crops. European Journal of Taxonomy, 740(1), 118–137. https://doi.org/10.5852/ejt.2021.740.1285
8. Zhang Y.M., Buffington M.L., Looney C., **László Z.**, Shorthouse J.D., Ide T., Lucky A. (2020) UCE data reveal multiple origins of rose gallers in North America: Global phylogeny of Diplolepis Geoffroy (Hymenoptera: Cynipidae) Molecular Phylogenetics and Evolution 153: 106949. doi: 10.1016/j.ympev.2020.106949
9. Pujade-Villar J., Wang Y., Zhang W., Mata-Casanova N., Lobato-Vila I., Dénes A.-L., **László Z.** (2020) A new Diplolepis Geoffroy (Hymenoptera, Cynipidae, Diplolepidini) species from China: a rare example of a rose gall-inducer of economic significance. ZooKeys 904: 131-146. doi: 10.3897/zookeys.904.46547
10. **László Z.**, Prázsmári H. (2019) Parasitoid community and parasitism in galls of the three Western Palaearctic oligo-and unilocular Diplolepis species (Hymenoptera: Cynipidae). Folia entomologica Hungarica 80: 231-235. doi: 10.17112/FoliaEntHung.2019.80.231
11. Nagy H.B., **László Z.**, Szabó F., Szőcs L., Dévai Gy., Tóthmérész B. (2019) Landscape-scale terrestrial factors are also vital in shaping Odonata assemblages of watercourses. Scientific Reports 9: 18196. doi: 10.1038/s41598-019-54628-7
12. Zhang Y., **László Z.**, Looney C., Dénes A.L., Hanner R., Shorthouse J. (2019) DNA barcodes reveal inconsistent species boundaries in Diplolepis rose gall wasps and their Periclistus inquilines (Hymenoptera: Cynipidae). The Canadian Entomologist 151(6): 717-727. doi:10.4039/tce.2019.59
13. **László Z.**, Dénes A.V., Király L., Tóthmérész B. (2018) Biased parasitoid sex ratios: Wolbachia, functional traits, local and landscape effects. Basic and Applied Ecology 31: 61-71.
14. Sándor A.D., Földvári M., Krawczyk A.I., Sprong H., Corduneanu A., Barti L., Görföl T., Estók P., Kováts D., Szekeres S., **László Z.**, Hornok S., Földvári G. (2018) Eco-epidemiology of novel Bartonella genotypes from parasitic flies of insectivorous bats. Microbial Ecology, 76(4): 1076–1088.
15. Lakatos K.T., **László Z.**, Tóthmérész B. (2018) Disturbance induced dynamics of a tritrophic novel ecosystem. Bulletin of Entomological Research 108(2): 158-165.
16. **László Z.**, Rákosy L., Tóthmérész B. (2018) The simpler the better: when decreasing landscape complexity increases community stability Ecological indicators 84: 828-836.
17. Prázsmári H., Mátis A., **László Z.** (2017) Eurytoma caninae (Hymenoptera: Eurytomidae) in the parasitoid community of unilocular Diplolepis galls in the Carpathian Basin Folia entomologica hungarica 78: 93-98.

18. **László Z.**, Prázsmári H., Kelemen T.I. (2016) Exeristes roborator (Fabricius, 1793) (Hymenoptera: Ichneumonidae) in the parasitoid community of Diplolepis galls in the Carpathian Basin Folia entomologica hungarica 77: 79–85.
19. Lakatos K.T., **László Z.**, Tóthmérész B. (2016) Resource dependence in a new ecosystem: A host plant and its colonizing community. Acta Oecologica 73: 80-86.
20. Lakatos K.T., **László Z.** (2015) Stephanus serrator (Fabricius, 1798) in Romania (Hymenoptera: Stephanidae). Folia entomologica hungarica, 76: 241–249.
21. Schlinkert H., Westphal C., Clough Y., **László Z.**, Ludwig M., et al. (2015) Plant size as determinant of species richness of herbivores, natural enemies and pollinators across 21 Brassicaceae species. PLoS ONE 10(8): e0135928.

D. Lucrări publicate în ultimii 10 anii în reviste şi volume de conferinţe cu referenţi (neindexate)

E. Brevete obţinute în întreaga activitate

Data: 25.06.2025

Semnătura:

A N E X A 4 . 1

Nume Prenume: **Lupan Iulia**
Gradul didactic: Conferențiar universitar

Instituția unde este titular: Universitatea Babeș-Bolyai

Facultatea: Biologie și Geologie
Departamentul: Biologie moleculară și Biotehnologie

L I S T A
lucrărilor ştiinţifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

Titlul de Doctor conferit de Universitatea "Babeș-Bolyai" din Cluj-Napoca în domeniul Biologie
Titlul tezei : "Clonarea, exprimarea şi caracterizarea biochimică a aspartazei, leucin dehidrogenazei şi alanin dehidrogenazei – aplicaţii biotehnologice"
Data obţinerii doctoratului - 21 martie 2007 prin Ordinul Ministrului Educaţiei şi Cercetării nr. 632 din 21.03.2007 (diploma nr. 255 din 23.04.2007)

B. Cărţi si capitole în cărţi publicate în ultimii 10 ani

1.

C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani
Autor principal

1. Sur, L. M., Sur, G., Samasca, G., & Lupan, I. (2019). Investigations of cellular immunity in juvenile idiopathic arthritis. Central-European journal of immunology, 44(1), 92–96. https://doi.org/10.5114/ceji.2019.83615
2. Aldea C, Delean D, Bulata B, Duicu C, Samasca G, Iancu M, Lupan I. Tacrolimus concentrations by ELISA and LC-MS/MS. Rom Biotechnol Lett. 2019; 24(5): 845-850. DOI: 10.25083/rbl/24.5/845.850
3. Lupan, I., Carpa, R., Oltean, A., Kelemen, B. S., & Popescu, O. (2017). Release of Antibiotic Resistant Bacteria by a Waste Treatment Plant from Romania. Microbes and environments, 32(3), 219–225. https://doi.org/10.1264/jsme2.ME17016
4. Girbovan, A., Sur, G., Samasca, G., & Lupan, I. (2017). Is the evidence of breast feeding protection against coeliac disease real? Allergologia et immunopathologia, 45(6), 616–618. https://doi.org/10.1016/j.aller.2017.01.005
5. Girbovan, A., Sur, G., Samasca, G., & Lupan, I. (2017). Dysbiosis a risk factor for celiac disease. Medical microbiology and immunology, 206(2), 83–91. https://doi.org/10.1007/s00430-017-0496-z

6. Iacob, D., Butnariu, A., Leucuţa, D. C., Samaşca, G., Deleanu, D., & Lupan, I. (2017). Evaluation of NT-proBNP in children with heart failure younger than 3 years old. Romanian journal of internal medicine = Revue roumaine de medecine interne, 55(2), 69–74. https://doi.org/10.1515/rjim-2017-0002
7. Butnariu, A., Zamfir, C., Iancu, M., Iacob, D., Samasca, G., & Lupan, I. (2016). Systolic and Diastolic Function in Congestive Heart Failure Pediatric Patients. Romanian journal of internal medicine = Revue roumaine de medecine interne, 54(1), 37–46. https://doi.org/10.1515/rjim-2016-0004
8. Lupan, I., Bulzu, P., Popescu, O., & Damert, A. (2015). Lineage specific evolution of the VNTR composite retrotransposon central domain and its role in retrotransposition of gibbon LAVA elements. BMC genomics, 16(1), 389. https://doi.org/10.1186/s12864-015-1543-z
9. Ionescu M, Radulescu AZ, Oniga S, Banciu HL, Lupan I. Inhibition of Streptococcus pneumoniae and Escherichia coli adenylate kinase by 2-amino-4-methyl-n'-arylidenethiazole-5-carbohydrazides. Farmacia 2015; 63(3): 338-342
10. Lupan, I., Ianc, M. B., Kelemen, B. S., Carpa, R., Rosca-Casian, O., Chiriac, M. T., & Popescu, O. (2014). New and old microbial communities colonizing a seventeenth-century wooden church. Folia microbiologica, 59(1), 45–51. https://doi.org/10.1007/s12223-013-0265-3
11. Lupan, I., Sur, G., Deleanu, D. et al. Celiac disease microbiota and its applications. Ann Microbiol 64, 899–903 (2014). https://doi.org/10.1007/s13213-013-0780-0
12. Butnariu, A., Iancu, M., Samaşca, G., Chira, M., & Lupan, I. (2014). Changes in NT-proBNP in young children with congenital heart malformations. Laboratory medicine, 45(1), 43–47. https://doi.org/10.1309/lmao4uy90yjqwkkp

Contributor

13. Floca E, Gaga R, Sur G, Lupan I, Armat I, Samasca G, Sur LM. A new autoimmune disease: atopic dermatitis in children. Allergologia et Immunopathologia 2022;50(6):17-21.
14. Crintea A, Drugan C, Constantin AM, Lupan I, Fekete Z, Silaghi CN, Crăciun AM. Assessment of Specific Tumoral Markers, Inflammatory Status, and Vitamin D Metabolism before and after the First Chemotherapy Cycle in Patients with Lung Cancer. Biology (Basel). 2022 Jul 8;11(7):1033. doi: 10.3390/biology11071033.
15. Sur ML, Moldovan BS, Mocanu D, Samasca G, Lupan I, Armat I, Harabagiu M, Sur G, Lazar C. Immune Responses to Some Viral Infections That Have a High Evolutionary Potential-A Case Report with Literature Review. Life (Basel). 2022 Jun 23;12(7):940. doi: 10.3390/life12070940.
16. Rimárová K, Samasca G, Makovický P, Žáková P, Lupan I, Dorko E, Diabelková J, Kaňuková L, Jenča A Jr, Petrášová A, Kluková D, Silaghi C, Makovický P. Genetically modified rodent models and celiac, non-celiac gluten sensitivity: a minireview. Cent Eur J Public Health. 2022 Jun;30 Suppl:S27-S31. doi: 10.21101/cejph.a6810.
17. Bordea MA, Costache C, Grama A, Florian AI, Lupan I, Samasca G, Deleanu D, Makovicky P, Makovicky P, Rimarova K. Cytokine cascade in Kawasaki disease versus Kawasaki-like syndrome. Physiol Res. 2022 Mar 25;71(1):17-27. doi: 10.33549/physiolres.934672.
18. Matyas M, Hasmasanu M, Silaghi CN, Samasca G, Lupan I, Orsolya K, Zaharie G. Early Preeclampsia Effect on Preterm Newborns Outcome. J Clin Med. 2022 Jan 17;11(2):452. doi: 10.3390/jcm11020452.

19. Crintea A, Dutu AG, Constantin A-M, Fekete Z, Samasca G, Lupan I, Florian A, Silaghi CN, Craciun A. The First Evaluation of Serum Levels of MGP, Gas6 and EGFR after First Dose of Chemotherapy in Lung Cancer. Biology (Basel) 2022;11(1):82. doi: 10.3390/biology11010082.
20. Sur LM, Armat I, Sur G, Pop D-C, Samasca G, Lupan I, Florian TL, Florian A, Sur D. Neurofibromatosis in Children: Actually and Perspectives. Children (Basel) 2022;9(1):40. doi: 10.3390/children9010040.
21. Florian IA, Lupan I, Sur L, Samasca G, Timiș TL. To be, or not to be… Guillain-Barré Syndrome. Autoimmun Rev. 2021 Oct 28:20(12):102983. doi: 10.1016/j.autrev.2021.102983.
22. Sur LM, Armat I, Duca E, Sur G, Lupan I, Sur D, Samasca G, Lazea C, Lazar C. Food Allergy a Constant Concern to the Medical World and Healthcare Providers: Practical Aspects. Life (Basel). 2021 Nov 8;11(11):1204. doi: 10.3390/life11111204. WOS:000725334200001.
23. Sur LM, Lupan I, Gaga R, Samasca G, Aldea C, Sur G, Lazar C. Laboratory Negative Predictive Factors for the Occurrence of Cardiac Complications in Children with Kawasaki Disease. Clin Lab. 2021 Nov 1;67(11). doi: 10.7754/Clin.Lab.2021.210343.
24. Bordea MA, Samasca G, Aldea C, Lupan I, Costache C. Prevalence of Serum Specific Antibodies to TORCH Agents in a Cohort of Children Using DiaSorin "Flash" Chemiluminescence Technology. Clinical Laboratory 2021 Aug 1;67(8). doi: 10.7754/Clin.Lab.2021.201219. WOS:000684711600028.
25. Crintea A, Dutu AG, Samasca G, Florian IA, Lupan I, Craciun AM. The Nanosystems Involved in Treating Lung Cancer. Life (Basel). 2021 Jul 13;11(7):682. doi: 10.3390/life11070682. WOS:000676796900001.
26. Sur LM, Gaga R, Duca E, Sur G, Lupan I, Sur D, Samasca G, Lazea C, Lazar C. Different Chronic Disorders That Fall within the Term Juvenile Idiopathic Arthritis. Life (Basel). 2021 Apr 27;11(5):398. doi: 10.3390/life11050398. WOS:000654184600001.
27. Burz C, Bojan A, Balacescu L, Pop VV, Silaghi C, Lupan I, Aldea C, Sur D, Samasca G, Cainap C, Chiorean B. Interleukin 8 as predictive factor for response to chemotherapy in colorectal cancer patients. Acta Clinica Belgica. 2021;76(2):113-118. WOS:000490418700001.
28. Masaebi F, Looha MA, Rostami-Nejad M, Pourhoseingholi MA, Mohseni N, Samasca G, Lupan I, Rezaei-Tavirani M, Zali MR. The Predictive Value of Serum Cytokines for Distinguishing Celiac Disease from Non-Celiac Gluten Sensitivity and Healthy Subjects. Iranian Biomedical Journal 2020;24(6):340-346.
29. Sur, D., Havasi, A., Cainap, C., Samasca, G., Burz, C., Balacescu, O., Lupan, I., Deleanu, D., & AlexandruIrimie (2020). Chimeric Antigen Receptor T-Cell Therapy for Colorectal Cancer. Journal of clinical medicine, 9(1), 182. https://doi.org/10.3390/jcm9010182
30. Remizovschi A, Carpa R, Forray F, Chiriac C, Roba C, Beldean-Galea S, Andrei A, Szekeres E, Baricz A, Lupan I, Knut R, Coman C (2020). Mud volcanoes and the presence of PAHs. Scientific Reports, 10(1). https://doi.org/10.1038/s41598-020-58282-2
31. Bordea, M. A., Pîrvan, A., Gheban, D., Silaghi, C., Lupan, I., Samașca, G., Pepelea, L., Junie, L. M., & Costache, C. (2020). Infectious Esophagitis in Romanian Children: From Etiology and Risk Factors to Clinical Characteristics and Endoscopic Features. Journal of clinical medicine, 9(4), 939. https://doi.org/10.3390/jcm9040939
32. Sur LM, Dascăl L, Sur G, Sur DG, Floca E, Aldea C, Lupan I, Samasca G. Diagnosis of gluten-related disorders: A new and challenging public health problem. Autoimmunity Reviews. 2019;18(6):645:646. WOS:000469522300014.

33. Daniel G. Sur, Marius Colceriu, Genel Sur, Cornel Aldea, Ciprian Silaghi, Gabriel Samasca, Iulia Lupan, Călin Căinap, Claudia Burz & Alexandru Irimie (2019) MiRNAs roles in the diagnosis, prognosis and treatment of colorectal cancer, Expert Review of Proteomics, 16:10, 851-856, https://doi.org/10.1080/14789450.2019.1659732
34. Claudia Burz, Andreea Rosca, Vlad-Vasile Pop, Rares Buiga, Cornel Aldea, Gabriel Samasca, Ciprian Silaghi, Daniel Sur, Iulia Lupan & Andreea Pricopie (2019) Liquid biopsy challenge and hope in colorectal cancer, Expert Review of Molecular Diagnostics, 19:4, 341-348, https://doi.org/10.1080/14737159.2019.1597708
35. Badiu Tișa, I., Samașca, G., Aldea, C., Lupan, I., Farcau, D., & Makovicky, P. (2019). Ganglioneuroblastoma in children. Neurological sciences : official journal of the Italian Neurological Society and of the Italian Society of Clinical Neurophysiology, 40(9), 1985–1989. https://doi.org/10.1007/s10072-019-03932-1
36. Sur, L., Silaghi, C., Colceriu, M., Sur, D.G., Aldea, C., Sur, G., Floca, E., Tătaru, A., Lupan, I., & Samașca, G. (2019). Immunology markers that can be predictive for the diagnosis of juvenile idiopathic arthritis. Journal of Laboratory Medicine, 44, 23 - 26. https://doi.org/10.1515/labmed-2019-0079
37. Sur L, Floca E, Samasca G, et al. Pearson Syndrome, A Medical Diagnosis Difficult to Sustain Without Genetic Testing. Clinical Laboratory. 2018 Mar;64(3):375-377. https://doi.org/10.7754/clin.lab.2017.171017
38. Munteanu, A., Munteanu, D., Iancu, M., Lupan, I., Samasca, G., Aldea, C., Mocan, T., & Iancu, C. (2018). Assessing immunological surgical stress markers in patients undergoing digestive surgery for pancreatic, hepatic and gastric tumors. Journal of B.U.ON. : official journal of the Balkan Union of Oncology, 23(6), 1655.
39. Danescu AS, Baldea I, Leucuta DC, Lupan I, Samasca G, Sitaru C, Chiorean R, Baican A. Immunological markers as predictors of developing steroid-induced diabetes mellitus in pemphigus vulgaris patients: An observational study. Medicine 2018;97(17):e0463 ISSN-0025-7974
40. Samasca, G., Ajay, R., Sur, D., Aldea, C., Sur, L., Floca, E., Sur, G., Lupan, I., Torsten, M., & Aaron, L. (2018). Polyautoimmunity - The missing ingredient. Autoimmunity reviews, 17(8), 840–841. https://doi.org/10.1016/j.autrev.2018.03.008
41. Makovicky, P., Makovicky, P., Lupan, I., Samasca, G., Sur, G., & Freeman, H. J. (2017). Perspective: Gluten-Free Products for Patients with Celiac Disease Should Not Contain Trace Levels. Advances in nutrition (Bethesda, Md.), 8(3), 409–411. https://doi.org/10.3945/an.116.014472
42. Samasca, G., Lerner, A., Girbovan, A., Sur, G., Lupan, I., Makovicky, P., Matthias, T., & Freeman, H. J. (2017). Challenges in gluten-free diet in coeliac disease: Prague consensus. European journal of clinical investigation, 47(5), 394–397. https://doi.org/10.1111/eci.12755
43. Pop, V. V., Seicean, A., Lupan, I., Samasca, G., & Burz, C. C. (2017). IL-6 roles - Molecular pathway and clinical implication in pancreatic cancer - A systemic review. Immunology letters, 181, 45–50. https://doi.org/10.1016/j.imlet.2016.11.010
44. Spârchez, M., Lupan, I., Delean, D., Bizo, A., Damian, L., Muntean, L., Tămaș, M. M., Bolba, C., Simionescu, B., Slăvescu, C., Felea, I., Lazăr, C., Spârchez, Z., & Rednic, S. (2015). Primary complement and antibody deficiencies in autoimmune rheumatologic diseases with juvenile onset: a prospective study at two centers. Pediatric rheumatology online journal, 13, 51. https://doi.org/10.1186/s12969-015-0050-8

45. Petkes H,Gal E, Bischin C, Lupan I, Majdik C, Cristea C, Silaghi-Dumitrescu L. Estimation of radical scavenging capacity of some diaryl- and phenothiazinyl-nitrones. Revue Roumaine de Chimie 2015; 60(7-8):659-664
46. Samasca, G., Sur, G., Iancu, M., Lupan, I., & Deleanu, D. (2015). Current trends and investigative developments in wheat allergy. International reviews of immunology, 34(6), 538–541. https://doi.org/10.3109/08830185.2015.1065827
47. Samasca, G., Sur, G., Iancu, M., Lupan, I., & Deleanu, D. (2015). Prevalence of Specific IgE to Wheat Flour Allergens in Romanian Pediatric Population. Iranian journal of allergy, asthma, and immunology, 14(5), 543–544.
48. Filip, I. H., Gál, E., Lupan, I., Perde-Schrepler, M., Lönnecke, P., Surducan, M., Găină, L. I., Hey-Hawkins, E., & Silaghi-Dumitrescu, L. (2015). Tuning the coordination properties of phenothiazine by regioselective introduction of diphenylphosphanyl groups. Dalton transactions (Cambridge, England : 2003), 44(2), 615–629. https://doi.org/10.1039/c4dt02665a

Articole în reviste indexate BDI, ca autor principal

49. Sur LM, Gaga R, Samasca G, Aldea C, Sur G, Lupan I. What is new in Dravet syndrome? Romanian Journal of Neurology 2021;20(2):135-137 DOI: 10.37897/RJN.2021.2.2.
50. Burz C, Pop V-V, Buiga R, Sur D, Samasca G, Aldea C, Lupan I. Circulating tumor cells in clinical research and monitoring patients with colorectal cancer. Oncotarget 2018;9(36):24561-24571.
51. Sur G, Sur L, Girbovan A, Samasca G, Alexandru G, Carpa R, Lupan I. Could Helicobacter pylori cause an abnormal immune response? Gastroenterol Hepatol Bed Bench. 2017;10(3):242-243.
52. Girbovan AM, Samasca G, Lupan I. Are Parasitic Infections a Solution in the Treatment of Celiac Disease? International Journal of Celiac Disease 2017;5(3):125-126.
53. Lupan I, Gîrbovan AM, Samasca G. Standardization of Genetic Tests in Celiac Disease. International Journal of Celiac Disease 2017;5(2):48-49.
54. Lupan I, Pirvan A, Sur G, Samasca G, Deleanu D, Abrudan C, Alexandru GD, Carpa R. Immunopathology of Pediatric Celiac Disease Associated with Helicobacter pylori Infection. International Journal of Celiac Disease 2016;4(3):80-81.
55. Rachisan AL, Pivan A, Miu N, Gheban D, Hrusca A, Samasca G, Lupan I. Is HLA Typing a Diagnostic Tool in Celiac Disease? International Journal of Celiac Disease 2016;4(1):9-10.
56. Butnariu A, Samasca G, Lupan I. Ethical implications in pharmacogenetics and pharmacogenomic. Medical Connections/Conexiuni Medicale 2015; 10(4):41-44.

Articole în reviste indexate BDI, ca şi contributor

57. Sur ML, Floca E, Lupan I, Sur G, Samasca G. Clinical Scenario for Medical Students in Adult Multiple Autoimmune Diseases. International Journal of Celiac Disease 2022;10(1):20-21.
58. Munteanu A, Samasca G, Lupan I, Iancu C. Immunological Evaluation of Surgical Stress in Liver Resections. Maedica-a Journal of Clinical Medicine 2017;12(4):289-292.
59. Sur ML, Floca E, Sur D, Lupan I, Sur G, Samasca G, Aldea C. Clinical Scenario for Medical Students in Pediatric Multiple Autoimmune Diseases. International Journal of Celiac Disease 2017;5(4):171-172.

60. Badiu I, Hiristau A, Lupan I, Samasca G. Congenital Lobar Emphysema in Infants. Maedica (Buchar) 2017; 12(2):133-135.
61. Samasca G, Sur G, Lupan I, Makovicky P, Freeman HJ. Challenges in the celiac disease diagnosis; Prague consensus. Gastroenterology and hepatology from bed to bench. 2017;10(1):1-2.
62. Diaconescu I, Alexandru G, Carpa R, Lupan I, Crisan C, Sur L, Sur G, Girbovan AM. Too Few Studies Provided a Link between Viral Infections and Celiac Disease. International Journal of Celiac Disease 2016;4(4):135-137.
63. Samasca G, Deleanu D, Sur G, Lupan I, Alexandru G, Carpa R. Is it necessary the screening of Helicobacter pylori infection in patients with celiac disease and iron deficiency? Gastroenterology and hepatology from bed to bench 2016; 9(4):345.
64. Samasca G, Pirvan A, Sur G, Abrudan C, Lupan I, Deleanu D. IgA Tissue Transglutaminase Antibodies at Different cut-offs in the Evaluation of Possible Celiac Patients. International Journal of Celiac Disease 2016;4(2):61-63.
65. Ilea C, Lupan I, Leucuta D-C, Lucaciu D. Investigation of Asporin Gene Polymorphism (rs387906276) as a Risc Factor for Primary Hip Osteoarthritis in Romanian Population. Medical Connections/Conexiuni Medicale 2015; 10(3):13-18.

D. Lucrări publicate în ultimii 10 anii în reviste şi volume de conferinţe cu referenţi (neindexate)

- Reviste

1.

- Selecţie cu maximum 20 lucrări în volume de conferinţe

1.

E. Brevete obţinute în întreaga activitate

1.

Data: 01.07.2025

Semnătura:

A N E X A 4 . 1

Nume Prenume: **Letiția Petrescu**
Gradul didactic: Conferenţiar
Instituția unde este titular: Universitatea Babeș-Bolyai
Facultatea: Facultatea de Chimie şi Inginerie Chimică
Departamentul: Departamentul de Inginerie Chimică

L I S T A
lucrărilor ştiinţifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

Titlul lucrării de doctorat: Computer Aided Design of Sustainable Industrial Processes
(în traducere: Proiectarea Asistată de Calculator a Proceselor Industriale Durabile)
Universitatea din Padova - Universitatea din Trieste, Italia
(Università degli Studi di Padova - Università degli Studi di Trieste)
Titlul echivalat de Centrul Naţional de Recunoaştere şi Echivalare a Diplomelor - Ministerul Educaţiei, Cercetării şi Inovării

B. Cărţi si capitole în cărţi publicate în ultimii 10 ani

C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani

C1. Green dimethyl carbonate production feasibility based on technical and environmental considerations, **Letitia Petrescu**, Carina-Alina Iurian, Fuel 399, (2025), 135663, (factor 6,7)

C2. Bio-Combined Heat & Power Plant Integrated with Calcium Looping: How Environmentally Friendly this Integration is? **Letitia Petrescu**, Stefan Cristian Galusnyak, Alexandru-Constantin Bozonc, Calin Cristian Cormos, Roberto Scaccabarozzi, Maurizio Spinelli, Elena Catalanotti, Journal of Cleaner Production, 498(2025), 145183, (factor 9,8).

C3. Comparative Analysis of Two Methyl Acetate Production Technologies: Investigation based on Process Modelling and Simulation, **Letitia Petrescu**, Daniela Mica, Fuel 388, (2025), 134586 (factor 6,7).

C4. Techno-environmental assessment of methanol production using chemical looping technologies, Stefan Cristian Galusnyak, **Letitia Petrescu**, Dora Andreea Chisalita, Calin-Cristian Cormos, Energy, 318 (2025), 134808, (factor 9).

C5. Towards value-added chemicals: Technical and environmental life cycle assessment evaluation of different glycerol valorisation pathways, Stefan Cristian Galusnyak, **Letitia Petrescu**, Imre-Lucaci Arpad, Calin-Cristian Cormos, Sustainable Energy Technologies and Assessments, 72(2024), 104043, (factor 7,1).

C6. Synthetic natural gas production based on biomass gasification with CO2 capture: Techno-economic and environmental impact evaluations, Calin-Cristian Cormos, Mihaela Dragan, **Letitia Petrescu**, Ana-Maria Cormos, Simion Dragan, Arthur-Maximilian Bathori, Stefan-Cristian Galusnyak, Energy, 312 (2024), 133507, (factor 9).

C7. A CHEMCAD Software Design Approach for Non-Conventional Biodiesel Production Using Methyl Acetate as Feedstock, **Letitia Petrescu**, Oana Beudean, Stefan Cristian Galusnyak and Calin-Cristian Cormos. Energies 17, 4504, 2024, (factor 3).

C8. Biodiesel production using various methanol sources and catalytic routes: A techno-environmental analysis, Stefan Cristian Galusnyak, **Letitia Petrescu**, Ariadna Maria Cosprundan, Calin-Cristian Cormos, Renewable Energy, 232 (2024) 121051, (factor 9).

C9. Comparison Of Membrane-Based Pre- And PostCombustion CO2 Capture Options Applied In Energy Intensive Industrial Applications Calin-Cristian Cormos, Marius Sandru, Cristian Dinca, Flavia-Maria Ilea, Alexandra Dudu, Mihaela Diana Lazar, Nela Slavu, Constantin Sava, **Letitia Petrescu**, Ana-Maria Cormos, Ionela Dumbrava, STUDIA CHEMIA, 2023 (factor 0,30).

C10. Environmental impact assessment of green ammonia coupled with urea and ammonium nitrate production, Stefan Cristian Galusnyak, **Letitia Petrescu**, Vlad-Cristian Sandu, Calin-Cristian Cormos, Journal of Environmental Management, 343 (2023), 118215, (factor 8,91).

C11. Techno-economic implications of time-flexible operation foriron-based chemical looping combustion cycle with energy storage capability Ana-Maria Cormos, **Letitia Petrescu**, Calin-Cristian Cormos, Energy, Volume 278, 127746, 2023 (factor 8,857).

C12. From secondary biomass to bio-methanol through CONVERGE technology: An environmental analysis, Ştefan Cristian Galusnyak, **Letitia Petrescu**, Dora Andreea Chisalita, Calin-Cristian Cormos, MarcoUgolini, Energies 16(6), 2726, 2023 (factor 3,252).

C13. Environmental evaluation of hydrogen production employing innovative chemical looping technologies – A Romanian case study, Dora-Andreea Chisalita, **Letitia Petrescu**, Stefan Cristian Galusnyak, Calin-Cristian Cormos, International Journal of Hydrogen Energy, Volume 48, Issue 32, 15 April 2023, Pages 12112-12128 (factor 7,139).

C14. Carbon Dioxide Capture in the Iron and Steel Industry: Thermodynamic Analysis, Process Simulation, and Life Cycle Assessment, Andrea Mio, **Letitia Petrescu**, Alexandra-Veronica Luca, Stefan Cristian Galusnyak, Maurizio Fermeglia, Calin-Cristian Cormos, Chemical and Biochemical Engineering Quarterly, 36 (4) 255–271, 2022, (factor 1,677).

C15. Classical and Process Intensification Methods for Acetic Acid Concentration: Technical and Environmental Assessment, **Letitia Petrescu** and Codruta-Maria Cormos, Energies, MDPI, 15(21), 8119, 2022 (factor 3,252).

C16. Environmental impact assessment of post-combustion CO2 capture technologies applied to cement production plants, Stefan Cristian Galusnyak, **Letitia Petrescu**, Calin-Cristian Cormos, Journal of Environmental Management, Volume 320, 115908, 2022 (factor 8,910).

C17. Life cycle assessment of methanol production and conversion into various chemical intermediates and products, Stefan Cristian Galusnyak, **Letitia Petrescu**, Dora Andreea Chisalita, Calin-Cristian Cormos, Energy, Volume 259, 124784, 2022 (factor 8,857).

C18. Classical vs. reactive distillation technologies for biodiesel production: an environmental comparison using LCA methodology Stefan Cristian Galusnyak, **Letitia Petrescu**, Calin-Cristian Cormos, Renewable Energy, Volume 192, June 2022, Pages 289-299 (factor 8,634).

C19. Techno-economic assessment of decarbonized biogas catalytic reforming for flexible hydrogen and power production, Calin-Cristian Cormos, Ana-Maria Cormos, **Letitia Petrescu**, Simion Dragan, Applied Thermal Engineering, Volume 207, 5 May 2022, 118218 (factor 6,465).

C20. Assessment of hybrid solvent – membrane configurations for post-combustion CO2 capture for super-critical power plants, Calin-Cristian Cormos, **Letitia Petrescu**, Ana-Maria Cormos, and Cristian Dinca, Energies, 2021, 14(16), 5017 (factor 3,252).

C21. Process simulation coupled with LCA for the evaluation of liquid - liquid extraction processes of phenol from aqueous streams, **Letitia Petrescu**, Silvia Burca, Maurizio Fermeglia, Andrea Mio, Calin-Cristian Cormos, Journal of Water Process Engineering, 41, 2021, 102077 (factor 7,34).

C22. Membrane technology applied to steel production: Investigation based on process modelling and environmental tools, Alexandra Veronica Luca, **Letitia Petrescu**, Journal of Cleaner Production, 2021, 294, 126256 (factor ISI 11,07).

C23. Assessment of flexible carbon capture and utilization options applied to gasification plants, **Letitia Petrescu**, Cristian Dinca, Calin-Cristian Cormos, UBB Chemia 2020, LXV, 4, 21 - 34 (factor ISI 0,447).

C24. Techno-economic and environmental assessment of hydrogen production based on natural gas steam reforming, Stefan Galusnyak, **Letitia Petrescu**, Calin-Cristian Cormos, UBB Chemia 2020, LXV, 4, 7 - 19 (factor ISI 0,447).

C25. Investigation, simulation and comparison of various routes for bioethanol production, **Letitia Petrescu**, Ana-Maria Posa, Studia UBB Chemia 2020, LXV, 3, 119 - 134 (factor ISI 0,447).

C26. Environmntal evaluation of European ammonia production considering various hydrogen supply chains, Dora-Andreea Chisalita, **Letitia Petrescu**, Calin-Cristian Cormos, Renewable and Sustainable Energy Reviews, Vol. 130,109964, 2020 (factor ISI 16,799).

C27. Modeling and Simulation of Methanol production from Coke Oven Gas (COG), **Letitia Petrescu**, Dumitrita-Aura Crisan, Studia UBB Chemia 2020, LXV, 2, 29 - 44 (factor ISI 0,447).

C28. Techno-Economic and Environmental Evaluations of Decarbonized Fossil-Intensive Industrial Processes by Reactive Absorption & Adsorption CO2 Capture Systems, Ana-Maria Cormos, Simion Dragan, **Letitia Petrescu**, Vlad Sandu and Calin-Cristian Cormos, Energies 2020, 13, 1268 (factor ISI 3,252).

C29. Life Cycle Assessment of SEWGS Technology Applied to Integrated Steel Plants, **Letitia Petrescu**, Dora Andreea Chisalita, Calin-Cristian Cormos, Giampaolo Manzolini, Paul Cobden, H.A.J van Dijk, Sustainability 2019, 11, 1825; (factor ISI 3,889).

C30. Assessing the environmental impact of an integrated steel mill with post-combustion CO2 capture and storage using the LCA methodology, Dora-Andreea Chisalita, **Letitia Petrescu**, Paul Cobden, H.A.J (Eric) van Dijk, Ana-Maria Cormos, Calin-Cristian Cormos, Journal of Cleaner Production, Volume 211, 1015-1025, 2019 (factor ISI 11,07).

C31. Carbon capture and utilisation technologies applied to energy conversion systems and other energy-intensive industrial applications, Ana-Maria Cormos, Cristian Dinca, **Letitia Petrescu**, Dora Andreea Chisalita, Szabolcs Szima, Calin-Cristian Cormos, Fuel, 211, 883-890, 2018 (factor ISI 8,035).

C32. Environmental assessment of IGCC power plants with pre-combustion CO2 capture by chemical & calcium looping methods, **Letitia Petrescu**, Calin-Cristian Cormos, Journal of Cleaner Production, 158, 233-244, 2017 (factor ISI 11,07).

C33. Life Cycle Assessment for supercritical pulverized coal power plants with post-combustion carbon capture and storage, **Letitia Petrescu**, Davide Bonalumi, Gianluca Valenti, Ana-Maria Cormos, Calin-Cristian Cormos, Journal of Cleaner Production, 157, 10-21, 2017 (factor ISI 11,07).

C34. Modeling and simulation of fuels production from syngas, **Letitia Petrescu**, Arpad Imre-Lucaci, Cristina Izabella Berci, Studia Chemia, LXII, 4, Tom II, 231-240, 2017 (factor ISI 0,447).

C35. Life Cycle Analysis applied to acrylic acid production process with different fuels for steam generation, **Letitia Petrescu**, Maurizio Fermeglia, Calin-Cristian Cormos, Journal of Cleaner Production, 133, 294-303, 2016 (factor ISI 11,07).

D. Lucrări publicate în ultimii 10 anii în reviste şi volume de conferinţe cu referenţi (neindexate)

- Reviste

D1. Solar-driven Calcium Looping Cycle for Time-flexible Carbon-free Power Generation with Thermochemical Energy Storage Capability, Calin-Cristian Cormos, **Letitia Petrescu**, Ana-Maria Cormos, Simion Dragan, Computer Aided Chemical Engineering, Volume 53, 2024, Pages 2017-2022.

D2. Techno-Economic Evaluation of Synthetic Natural Gas Production based on Biomass Gasification with CO2 Capture, Calin-Cristian Cormos, Mihaela Dragan, **Letitia Petrescu**, Simion Dragan, Ana-Maria Cormos, Stefan-Cristian Galusnyak, Arthur-Maximilian Bathori, Chemical Engineering Transactions, volume 103, 2023, Pages 7-12.

D3. Integration of renewable energy and CO2 capture and utilization technologies for decarbonization of energy intensive process industries, Calin-Cristian Cormos, **Letitia Petrescu**, Ana-Maria Cormos, Simion Dragan, Cristian Dinca, Marius, Sandru, Escape 33, 2023, Computer Aided Chemical Engineering, 52, 2023, Pages 2777-2784.

D4. Technical evaluation and comparison of various added value products derived from glycerol, **Letitia Petrescu**, Stefan C. Galusnyak, Flavia A. Grozav, Imre Lucaci-Arpad, Calin C. Cormos, SDEWES 2023, Archival Paper, 2023.

D5. Assessment of Green Hydrogen Production from Sorption-enhanced Biomass Gasification with CO2 Capture Feature, Calin-Cristian Cormos, Mihaela Dragan, **Letitia Petrescu**, Ana-Maria Cormos, Simion Dragan, Stefan-Cristian Galusnyak, Arthur-Maximilian Bathori, SDEWES 2023, Archival Paper, 2023.

D6. Assessment of hydrogen production systems based on biogas catalytic reforming with carbon capture, Calin-Cristian Cormos, **Letitia Petrescu**, Ana-Maria Cormos, Simion Dragan, 23rd World Hydrogen Energy Conference (WHEC2022), Istambul, Turcia.

D7. Integration of thermo-chemical energy storage for flexible operation of decarbonized power plants, Calin-Cristian Cormos, **Letitia Petrescu**, Ana-Maria Cormos, Escape 32, 2022, Computer Aided Chemical Engineering, Volume 51, 2022, Pages 631-636.

D8. Assessment of CO2 utilization technologies into valuable C1 organic chemicals: a modelling and simulation analysis, Stefan C. Galusnyak, Ionela D. Dumbrava, **Letitia Petrescu**, Simion Dragan, Calin C. Cormos, Chemical Engineering Transactions, VOL. 94, 2022, Pages 397-402.

D9. Assessment of Flexible Thermochemical Energy Conversion and Storage System based on Chemical Looping Combustion, Calin-Cristian Cormos, Simion Dragan, Ana-Maria Cormos, **Letitia Petrescu**, VOL.94, 2022, Pages 25-29.

D10. Application of Carbonate Looping Cycle as an Energy-efficient Decarbonization Process of Key Fossil-intensive Industrial Applications, Calin-Cristian Cormos, Simion Dragan, Ana-Maria Cormos, **Letitia Petrescu**, Vlad-Cristian Sandu, Ionela-Dorina Dumbrava, Stefan Galusnyak, 10th International Conference on ENERGY and ENVIRONMENT (CIEM), 2021, pp. 1-5, doi: 10.1109/CIEM52821.2021.9614941.

D11. Life Cycle Assessment of Bio-methanol Derived from Various Raw-materials, Stefan C. Galusnyak, **Letitia Petrescu**, Dora A. Chisalita, Calin C. Cormos, Chemical Engineering Transactions, Vol.86, 2021, 667-672.

D12. Decarbonization of Fossil Energy-intensive Industrial Processes using Innovative Calcium Looping Technology, Calin Cristian Cormos, Ana-Maria Cormos, **Letitia Petrescu**, Cristian Dinca, Chemical Engineering Transactions, Vol.86, 2021, 937-942.

D13. Modelling and Simulation of Methanol and Biodiesel Production Processes using Innovative Technologies, **Letitia Petrescu**, Stefan C. Galusnyak, Dora A. Chisalita, Calin C. Cormos, Chemical Engineering Transactions, Vol.80, 181-186, 2020.

D14. Modelling and Simulation of Methanol Production and Conversion into Various Chemical Intermediates and Products, **Letitia Petrescu**, Stefan-Cristian Galusnyak, Dora-Andreea Chisalita, Calin-Cristian Cormos. Proceedings of the 30th European Symposium on Computer Aided Process Engineering, Elsevier, Book ISBN: 9780128233771, volume 48, 553 - 558, 2020.

D15. Environmental comparison of various ammonia production plants with carbon capture and storage, D.A. Chisalita, **L.Petrescu**, C.C. Cormos, 14th Conference on Sustainable Development of Energy, Water and Environment Systems, Dubrovnik, Croatia, 1 - 6 October, 2019.

1D6. Reducing Carbon Footprint of Energy-Intensive Applications by CO2 Capture Technologies: An Integrated Technical and Environmental Assessment, A.M. Cormos, S. Dragan, **L. Petrescu**, D.A. Chisalita, S. Szima, V.C. Sandu, C.C. Cormos, Chemical Engineering Transactions, vol.76, 2019, 1033-1038.

D17. Sorption-enhanced water-gas shift technology platform for cost effective CO2 reduction in the iron & steel industry, Van De Water, L.G.A. , Lukashuk, L., Van Dijk, H.A.J. , Cobden, P.D., Lundqvist, M. , Manzolini, G. , **Petrescu, L.** , Van Der Veer, S. , Mancuso, L., Johns, J., Bellqvist, D., 12th Natural Gas Conversion Symposium 20192019, Pages 544-54712th Natural Gas Conversion Symposium 2019; San Antonio; United States; 2 June 2019 through 6 June 2019.

D18. Assessing Energy and CO2 Emission Reduction from Ammonia Production by Chemical Looping as Innovative Carbon Capture Technology, Dora-Andreea Chisalita, **Letitia Petrescu**, Ana-Maria Cormos, Calin-Cristian Cormos, Proceedings of the 28th European Symposium on Computer Aided Process Engineering - ESCAPE 28, Elsevier, Book ISBN: 9780444642356, volume 43, 1269 - 1274, 2018.

D19. Assessing the CO2 Emissions Reduction from Cement Industry by Carbon Capture Technologies: Conceptual Design, Process Integration and Techno-economic and Environmental Analysis, Calin-Cristian Cormos, Ana-Maria Cormos, **Letitia Petrescu**, Proceedings of the 27th European Symposium on Computer Aided Process Engineering - ESCAPE 27, Elsevier, Book ISBN: 9780444639653, volume 40, 2593 - 2598, 2017.

D20. Process design and integration of various carbon capture approaches into the energy sector and other energy-intensive industrial applications, Calin-Cristian Cormos, **Letitia Petrescu**, Ana-Maria Cormos, Serban Agachi. Computer Aided Chemical Engineering 38, 265-270, 2016.

E. Brevete obţinute în întreaga activitate

Data: **Semnătura:**

01.07.2025

A N E X A 4 . 1

Nume Prenume: **Podar Dorina**
Gradul didactic: Conferențiar

Instituția unde este titular: Universitatea Babeș-Bolyai

Facultatea: Biologie și Geologie
Departamentul: Biologie Moleculară și Biotehnologie

L I S T A
lucrărilor ştiinţifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

Doctorat în Biologie, distincția Cum laude, Universitatea "Babeş-Bolyai", Facultatea de Biologie și Geologie, Cluj-Napoca, perioada 1999-2005. Titlul: Influenţa metalelor grele asupra indicilor fiziologici la unele specii de plante cu importanţă în fitoremediere, conducător ştiinţific Prof. Dr. Mihai Trifu

B. Cărţi si capitole în cărţi publicate în ultimii 10 ani

Capitole

1. Vaculík M., Mišljenović T., Lukačová Z., Jakovljević K., **Podar D.,** Ková, J. 2025 Zinc hyperaccumulation in plants: mechanisms and principles. In *Zinc in Plants* (pp. 1-39). Academic Press. https://doi.org/10.1016/b978-0-323-91314-0.00017-x

Cărți

1. Pop-Păcurar I, **Podar D.** 2025 Biology cls a VIII-a, Editorial ART Group, București, ISBN in 978-606-076-731-2.
2. Pop-Păcurar I, **Podar D.** 2024 Biology cls a VII-a, Editorial ART Group, București, ISBN 978-606-076-830-2.
3. Pop-Păcurar I, **Podar D**, Dudan C. 2023 Biology cls a VI-a, Editorial ART Group, București, ISBN 978-606-076-554-7.
4. Pop-Păcurar I, **Podar D**, Domi D. 2023 Caiet de lucrări practice Biologie cls a VI-a, Editorial ART Group, București, ISBN 978-606-076-585-1.Pop-Păcurar I, **Podar D.** 2022 Biology cls a V-a, Editorial ART Group, București, ISBN 978-606-076-252-2.
5. Saitan, T., Popescu, O., Simon Gruiță, A., Șerban, A., **Podar, D.** și alții 2020 Olimpiada de Biologie - Clasele XI-XII, Subiecte si bareme 2014-2019 - Faza judeteana si faza nationala, Editura Didactica Publishing House, ISBN 594-849-500-282-4.

6. Saitan, T., Popescu, O., Simon Gruiță, A., Șerban, A., **Podar, D.** și alții 2020 Olimpiada de Biologie – Clasele IX-X, Subiecte si bareme 2014-2019 - Faza judeteana si faza nationala, Editura Didactica Publishing House, ISBN 594-849-500-281-7.
7. Saitan, T., Popescu, O., Simon Gruiță, A., Șerban, A., **Podar, D.** și alții 2020 Olimpiada de Biologie – Clasa a VII-a, Subiecte si bareme 2014-2019 - Faza judeteana si faza nationala, Editura Didactica Publishing House, ISBN 594-849-500-280-0.
8. Pop-Păcurar I, **Podar D**, Domi D. 2018.Caiet de lucrări practice Biologie cls a VI-a, Grupul Editorial ART, București, ISBN 978-606-003-112-3.
9. Pop-Păcurar I, **Podar D.** 2017. Biologie cls a V-a, Grupul Editorial ART, București, ISBN 978-606-710-357-1.

C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani

1. Tiodar ED, Chiriac CM, Pošćić F., Văcar CL, Balázs ZR, Coman C, Weindorf DC, Krämer U, **Podar D.** 2024 Plant colonizers of a mercury contaminated site: trace metals and associated rhizosphere bacteria. Plant Soil, 502: 373-396. https://doi.org/10.1007/s11104-024-06552-7 Q1
2. László Z, Szilágyi B, Macalik B, Biró M, Iordache C-T, Nicula M, **Podar D.** 2024 Successful gall induction on wild roses by gall wasps under lab conditions. Ecological Entomology, 49(6): 979-982. https://doi.org/10.1111/een.13366 Q2
3. Soran M-L, Lung I, Stegarescu A, Culicov O, Opriș O, Nekhoroshkov P, **Podar D.** 2023 Correlation of Elemental Transfer, Bioactive Compounds and Antioxidant Activity on Lactuca sativa L. Grown in Soil with Functionalized CNT and HMs. Metabolites 13(12): 1171, https://doi.org/10.3390/metabo13121171 Q2
4. **Podar D.**, Boza C-L, Lung I, Soran M-L, Culicov O, Stegarescu A, Opriș O, Ciorîță A. 2023. The Effect of Functionalized Multiwall Carbon Nanotubes with Fe and Mn Oxides on *Lactuca sativa* L., Plants, 12, 1959. https://doi.org/10.3390/plants12101959 Q2
5. Turtureanu PD, Pușcaș M, **Podar D**, Balázs Z, Hurdu BI, Novikov A, Renaud J, Saillard A, Bec S, Șuteu D, Băcilă I, Choler P. 2023. Extent of intraspecific trait variability in ecologically central and marginal populations of a dominant alpine plant across European mountains, Annals of Botany, 132(2): 335–347. https://doi.org/10.1093/aob/mcad105 Q1
6. Văcar CL, Ciorîță A, Tudoran C, **Podar D**, Carpa R, Leoștean C, Kacso I, Mircea C. 2023. Compact cold atmospheric pressure plasma cleaner suited for inhibiting bacterial biodeteriogens from paper archives, Journal of Cultural Heritage, 62: 198-205, https://doi.org/10.1016/j.culher.2023.05.027 Q1
7. Văcar CL, Mircea C, Pârvu M, **Podar D.** 2022. Diversity and Metabolic Activity of Fungi Causing Biodeterioration of Canvas Paintings. *J. Fungi*, 8(6), 589. 10.3390/jof8060589
8. **Podar D**, Maathuis FJM. 2022. Primary nutrient sensors in plants. *iScience*, 25(4): 104029. https://doi.org/10.1016/j.isci.2022.104029
9. Stanton C, Sander D, Krämer U, **Podar D.** 2022. Zinc in plant: Integrating homeostasis and biofortification. *Molecular Plant*. 15(1):65-85. https://doi.org/10.1016/j.molp.2021.12.008

10. **Podar D**, Maathuis FJM. 2021. The role of roots and rhizosphere in providing tolerance to toxic metals and metalloids. *Plant, Cell & Environment*, 45(3):719-736. https://doi.org/10.1111/pce.14188
11. Văcar CL, Covaci E, Chakraborty S, Li B, Weindorf DC, Frențiu T, Pârvu M, **Podar D.** 2021. Heavy Metal-Resistant Filamentous Fungi as Potential Mercury Bioremediators. *J. Fungi*, 7(5), 386. https://doi.org/10.3390/xxxxx
12. Balázs HE, Schmid CAO, Cruzeiro C, **Podar D**, Szatmari P-M, Buegger F, Hufnagel G, Radl V, Schröder P. 2021. Post-reclamation microbial diversity and functions in hexachlorocyclohexane (HCH) contaminated soil in relation to spontaneous HCH tolerant vegetation, *Science of the Total Environment*, 144653. https://doi.org/10.1016/j.scitotenv.2020.144653
13. Tiodar ED, Văcar CL, **Podar D.** 2021. Phytoremediation and Microorganisms-Assisted Phytoremediation of Mercury-Contaminated Soils: Challenges and Perspectives. *Int. J. Environ. Res. Public Health*, 18, 2435. https://doi.org/10.3390/ijerph18052435
14. Ciorîță A, Tripon SC, Mircea IG, **Podar D**, Barbu-Tudoran L, Mircea C, Pârvu M. 2021. The Morphological and Anatomical Traits of the Leaf in Representative Vinca Species Observed on Indoor- and Outdoor-Grown Plants. *Plants*, 10(4):622. https://doi.org/10.3390/plants10040622
15. Butiuc-Keul A, Carpa R, **Podar D**, Szekeres E, Muntean V, Iordache D, Farkas A. 2021. Antibiotic Resistance in Pseudomonas spp. Through the Urban Water Cycle. *Curr Microbiol.* https://doi.org/10.1007/s00284-021-02389-w
16. Turtureanu PD, Bec S, Hurdu B, Saillard A, Šibík,J, Balázs ZR, Barros C, Novikov A, Renaud J, **Podar D**, Thuiller W, Pușcaș M, Choler P. 2020. Biogeography of intraspecific trait variability in matgrass (Nardus stricta): high phenotypic variation at the local scale exceeds large scale variability patterns. *Perspectives in Plant Ecology, Evolution and Systematics*, 46:125555. https://doi.org/10.1016/j.ppees.2020.125555)
17. Farkas A, Mereuti F, Butiuc-Keul A, **Podar D**, Roba C, Bălc R. 2020 Effects of Long-Term exposure to Heavy Metals upon Rhizosphere Bacteria from Baia Mare Area (Maramureş County, Romania). *Geomicrobiology Journal* 37(9): 867-876 https://doi.org/10.1080/01490451.2020.1795319
18. Balázs HE, Schmid CAO, **Podar D**, Hufnagel G, Radl V, Schroeder P. 2020. Development of microbial communities in organochlorine pesticide contaminated soil: a post-reclamation perspective. *Applied Soil Ecology*, 150:103467. https://doi.org/10.1016/j.apsoil.2019.103467
19. **Podar D**, Macalik K, Réti KO, Martonos I, Török E, Carpa R, Weindorf DC, Csiszár J, Székely G 2019. Morphological, physiological and biochemical aspects of salt tolerance of halophyte *Petrosimonia triandra* grown in natural habitat. *Physiology and Molecular Biology of Plants*, 25(6):1335-1347. https://doi.org/10.1007/s12298-019-00697-x
20. Gargiulo R, Pironon S, Zheleznaya E. Sanchez MD, Balázs ZR, **Podar D**, Wilkinson T, Jäkäläniemi A, Kull T, Väre H, Fay MF. 2019 Phylogeography and post-glacial dynamics in the

clonal-sexual orchid Cypripedium calceolus. *Journal of Biogeography*, 46(3): 526-538. https://doi.org/10.1111/jbi.13528

21. Menguer P, Vincent T, Miller AJ, Brown JKM, Vincze E, Borg S, Preben BH, Sanders D, **Podar D.** 2018 Improving zinc accumulation in barley endosperm using HvMTP1 transition metal transporter. *Plant Biotechnology Journal*, 16(1): 63-71. https://doi.org/10.1111/pbi.12749
22. McGladdery C, Weindorf DC, Chakraborty S, Li B, Paulette L, **Podar D**, Pearson D, Kusi NYO, Duda B. 2018. Elemental assessment of vegetation via portable X-ray fluorescence (PXRF) spectrometry, *Journal of Environmental Management*, 210: 210-225. https://doi.org/10.1016/j.jenvman.2018.01.003
23. Balázs EH, Schmid CAO, Feher I, **Podar D**, Szatmari P-M, Marincaş O, Balázs ZR, Schröder P. 2018. HCH phytoremediation potential of native plant species from a contaminated urban site in Turda, Romania, *Journal of Environmental Management*, 223: 286-296. https://doi.org/10.1016/j.jenvman.2018.06.018
24. Mot AC, Puscas C, Miclea C, Naumova-Letia G, Dorneanu S, **Podar D**, Dissmeyer N, Silaghi-Dumitrescu R. 2018. Redox control and autooxidation of class 1, 2 and 3 phytoglobins from *Arabidopsis thaliana*. *Scientific Reports*, 13714. https://doi.org/10.1038/s41598-018-31922-4
25. Fábián I, Török E, **Podar D**, Székely Gy. 2018 Plant ascorbate peroxidase: molecular phylogeny and role in oxidative stress. Studia Universitatis Babes-Bolyai, Biologia, LXIII(2): 153-168.
26. Balázs ZR, Roman A, Balázs HE, Căpraș D, **Podar D.** 2016 Rediscovery of *Cypripedium calceolus* L. in the vicinity of Cluj-Napoca (Romania) after 80 years. *Botanical Contribution*, LI: 43-53.
27. Rigo G, Szekely G, **Podar D**, Ayaydin F, Zsigmond L, Kovacs H, Kiraly A, Szabados Lz, Koncz Cs, Cseplo A. 2014 The role of *Arabidopsis* genes involved in abiotic (osmotic, oxidative and gravitropic) stress response regulations. *Studia Universitatis Babes-Bolyai, Biologia*, LIX: 63-70.

D. Lucrări publicate în ultimii 10 anii în reviste şi volume de conferinţe cu referenţi (neindexate)

- Reviste

- Selecţie cu maximum 20 lucrări în volume de conferinţe

E. Brevete obţinute în întreaga activitate

Data:
01.07.2025

Semnătura: Conf. Dr. Dorina Podar

E – Brevete (pentru întreaga activitate)

A N E X A 4 . 1

Nume Prenume: **Timiș Elisabeta Cristina**
Gradul didactic: Conferențiar

Instituția unde este titular: Universitatea Babeș-Bolyai

Facultatea: Chimie și Inginerie Chimică
Departamentul: Inginerie Chimică

L I S T A
lucrărilor ştiinţifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

1. Doctorat în **Știință și Tehnologie** (2009) al Lappeenranta University of Technology (Finlanda). Inginerie de Proces. Titlul tezei: Minimizarea efortului experimental pentru predicția propagării poluanților în râuri. Modelare matematică și re-utilizarea informației. Conducător științific: **Prof. Dr. Andrzej Kraslawski**
2. Doctorat in **Inginerie Chimică** (2010) al Universității Babeş-Bolyai (România). Titlul tezei: Modelarea transportului de poluanți în râuri: abordare din perspectiva ingineriei de proces. Conducător științific: **Prof. Dr. Paul Șerban Agachi**

B. Cărţi si capitole în cărţi publicate în ultimii 10 ani

1. Bodescu, G.A., Daraban, R.G., Mihaly, N.B., Cristea, C.E., **Timis, E.C.,** Kiss, A.A., Cristea, V.M., Control of the WWTP Water Line Using Traditional and Model Predictive Approaches, Systems and Control Transactions 4:1108-1113. https://doi.org/10.69997/sct.175378

C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani

1. **Timis, E.C.,** Hangan, H., Cristea, V.M., Mihaly, N.B., Hutchins, M.G., 2025. High- Resolution Flow and Phosphorus Forecasting Using ANN Models, Catering for Extremes in the Case of the River Swale (UK). Hydrology 2025, 12(2), 20, 1-23. https://doi.org/10.3390/hydrology12020020
2. Boga, B., Baur, K., **Timis, E.C.,** Lund H., Peppel, T., Cristea, V.M., Kockmann N., Steinfeldt N., Photocatalytic antibiotic degradation in coated open microchannels by applying 2D and 3D flow modeling with kinetics, Journal of Environmental Chemical Engineering, 12, 6, 114173. https://doi.org/10.1016/j.jece.2024.114173
3. Borota, M., **Timis, E.C.,** Hutchins, M.G., Cristea, M.V., Bowes, M., Miller, J., 2024. Hydrodynamics and phosphorus loading in an urbanized river channel influences response to future managed change: insights from advection-dispersion modelling, Science of the Total Environment, 927, 171958. https://doi.org/10.1016/j.scitotenv.2024.171958

4. Crisan, C.A., **Timis, E.C.,** Vermesan, H., 2023. PickT: a decision-making tool that supports the optimal pickling process operation, Materials, 16, 5567. https://doi.org/10.3390/ma16165567
5. **Timis, E.C.,** Hutchins, M.G., Cristea, V.M., 2022. Advancing understanding of in-river phosphorus dynamics using an advection-dispersion model (ADModel-P). Journal of Hydrology, 612, Part B, 128173, https://doi.org/10.1016/j.jhydrol.2022.128173
6. **Timis, E.C.,** 2022. Improvements necessary for a river pollutant transport model to obtain a better performance. Studia Universitatis Babes-Bolyai Chemia, 67, 1, 75-87, DOI:10.24193/subbchem.2022.1.05
7. **Timis E.C.,** 2022b. Estimation of uncontrollable and unclassifiable pollutant sinks and sources along a river stretch employing software tools. Ed. Ortega-Sánchez, M., *Proceedings of the 39th IAHR World Congress – IAHR 2022*, Granada, Spain, 19–24 June 2022, IAHR, ISSN-L 2521-7119, ISBN/EAN: 978-90-832612-1-8, Theme 6, Paper 06-01-003-81, 3623 – 3631. doi:10.3850/IAHR-39WC25217119202281, https://cmswebonline.com/iahr2022/epro/html/06-01-003-81.xml
8. **Timis (Ani) E.C.,** Cristea M.V., Agachi P.Ş., 2015. Factors influencing pollutant transport in rivers: Fickian approach applied to the Somes River. *Revista de Chimie*, 66, 9, 1495-1503, https://www.revistadechimie.ro/pdf/TIMIS%20A.pdf%209%2015.pdf
9. Cristea V.M., **Ani E.C.,** Agachi P.S., 2013. Advanced Control Used for Counteracting Accidental Pollutant Propagation in Rivers, *Computer Aided Chemical Engineering*, 32, 1003-1008. https://doi.org/10.1016/B978-0-444-63234-0.50168-8

D. Lucrări publicate în ultimii 10 anii în reviste şi volume de conferinţe cu referenţi (neindexate) - Selecţie cu maximum 20 lucrări în volume de conferinţe

1. Prodan, A.I., **Timis, E.C.,** Cristea, V.M., 2025. The automatic control of flow rate in a river reach manipulating the upstream river reservoir discharge, International Conference Students for Students XXIst Edition, Cluj-Napoca, 9-13 April 2025, p. 36-37. https://oscciuj.ro/international-conference-students-for-students/, https://drive.google.com/drive/folders/1uiDVcnCIfdlY7zFo3fiqQPokqn-qNDzo
2. Vereș-Dănciuț, T., Miclaus, A.L., **Timis, E.C.,** Cristea, V.M., 2025. Improving wastewater treatment plant performance by efficiently modifying the recycle flow streams. International Conference Students for Students XXIst Edition, Cluj-Napoca, 9-13 April 2025, p. 44-45. https://oscciuj.ro/international-conference-students-for-students/, https://drive.google.com/drive/folders/1uiDVcnCIfdlY7zFo3fiqQPokqn-qNDzo
3. Nagy, H.B., **Timis, E.C.,** Mereu A.R., 2024. Indium Tin Oxide precursors synthesis: temperature control, International Conference Students for Students XXth Edition, Cluj-Napoca, 17-21 April 2024, 17-18, https://oscciuj.ro/international-conference-students-for-students/, https://www.chem.ubbcluj.ro/studenti/files/PROGRAM%20ICSFS%20XX.pdf
4. Prodan, A.I., Cocis Vagner, C., **Timis E.C.,** Cristea V.M., 2024. A simulation tool for the dynamics of water flow and water depth along a reach of Somesul Mic River (RO), International Conference Students for Students XXth Edition, Cluj-Napoca, 17-21 April 2024, 15-16,

https://osccluj.ro/international-conference-students-for-students/, https://www.chem.ubbcluj.ro/studenti/files/PROGRAM%20ICSFS%20XX.pdf

5. Nemethi, O.R., Dejan, K., Tarniță, G., **Timiș, E.C.,** Bizo, L., 2024, Ga concentration optimization to enhance the optical properties of Ga-doped ZnO nanopowders prepared by solid state reaction, International Conference Students for Students XXth Edition, Cluj-Napoca, 17-21 April 2024, 85-86, https://osccluj.ro/international-conference-students-for-students/, https://www.chem.ubbcluj.ro/studenti/files/PROGRAM%20ICSFS%20XX.pdf
6. Borota, M., **Timis, E.C.,** Cristea, V.M., Hutchins, M.G., 2023. Calibration of an advection-dispersion model to an urban river stretch (River The Cut, UK) to reveal the in-stream phosphorous transformations, presentation 4G_SS12 at the Symposium for European Freshwater Sciences (SEFS13), 18-23 June 2023, Newcastle, UK. https://www.sefs13.com/programme
7. Borota, M., **Timis, E.C.,** Cristea, V.M., Hutchins, M.G., 2022. A method based on sensitivity analysis for the identification of the most influential phosphorus stressors along a river stretch. Ed. Ferras Segura, D., et al., Proceedings of the 3rd IAHR Young Professionals Congress, online, 28 November - 2 December 2022, IAHR, ISBN: 978-90-832612-8-7, 183-184, https://www.iahr.org/library/infor?pid=22134
8. Borota, M., **Timis, E.C.,** 2022. Transfer of pollutant transport modelling knowledge from River Swale to River The Cut (UK). International Conference Students for Students XVIIIth Edition, Cluj-Napoca, 06-09 April 2021, Conference Book of Abstracts, 21-22.
9. Borota, M., **Timis, E.C.,** 2021. Testing different optimization algorithms for the calibration of a pollutant transport model. International Conference Students for Students XVIIth Edition, Cluj-Napoca, 21-25 April 2021, Conference Book of Abstracts, 19-21.
10. Crisan, A.C., **Timis, E.C.,** Vermesan, H., 2021. Corrosion rate modelling for steel in acidic media using cetylpyridinium bromide as a green inhibitor. The XVIIth edition of the International Conference Students for Students, Cluj-Napoca, 21-25 April 2021, Conference Book of Abstracts, 42-43.

E. Brevete obținute în întreaga activitate

Nu este cazul

Data: **Semnătura:**

01.07.2025

A N E X A 4 . 1

Nume Prenume: **Varga Richard-Attila**
Gradul didactic: Conferențiar

Instituția unde este titular: Universitatea Babeș-Bolyai

Facultatea: Facultatea de Chimie si Inginerie Chimica
Departamentul: de Chimie

L I S T A
lucrărilor ştiinţifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

Hypervalent Tin and Lead Compounds, 2003, Facultatea de Chimie şi Inginerie Chimică, Universitatea ‘’Babeş-Bolyai’’

B. Cărţi si capitole în cărţi publicate în ultimii 10 ani

1. C–H Bond Activation Mediated by Inorganic and Organometallic Compounds of Main Group Metals (Chapter 4)
C.I. Raț, A. Soran, R. A. Varga, C. Silvestru,
în *Adv. Organomet. Chem.*, eds. P. J. Pérez, F. G. A. Stone, R. West, Academic Press, **2018**, 70, 233-311.
DOI: 10.1016/bs.adomc.2018.07.003

C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani

1. Structural and *ab initio* studies on the polymorphism of iminophosphorane $(CH_3C_6H_4)_3P{=}NP[(=O)(OPh)_2]$
M. F. Petric, M. E. Crisan, Y. M. Chumakov, A. Micle, I. Neda, R. A. Varga, G. Ilia,
J. Mol. Struct., **2015**, *1083*, 389–397.
DOI: 10.1016/j.molstruc.2014.11.018

2. Molecular structure of $[SnCl_4(N{=}CH\text{-}C_6H_5)(2,6\text{-}^iPr_2)C_6H_3]$, a tin tetrachloride complex with an (imino)aryl ligand
I. Barbul, R. A. Varga,
Rev. Roum. Chim., **2015**, *60(7-8)*, 845-848.

3. Triorganotin(IV) halides – precursors for new organotin(IV) tectons. Synthesis and structural characterization of $[2\text{-}\{(CH_2O)_2CH\}C_6H_4]_3SnI$ and $[2\text{-}(O{=}CH)C_6H_4]_3SnCl$
A. A. Somesan, C. Silvestru, R. A. Varga,
Rev. Roum. Chim., **2015**, *60(11-12)*, 1097-1106.

4. Supramolecular anion recognition by β-HCH

M. I. Rednic, R. A. Varga, A. Bende, I. G. Grosu, M. Miclăuş, N. D . Hădade, A. Terec, E. Bogdan, I. Grosu
Chem. Commun., **2016**, *52*, 12322-12325.
DOI: 10.1039/c6cc06842a

5. New organotin(IV) bromides containing potential donor ligands. Synthesis, characterization and supramolecular architecture
A. A. Somesan, R. A. Varga, C. Silvestru,
Inorg. Chim. Acta, **2018**, *475*, 177-183.
DOI: 10.1016/j.ica.2017.09.066

6. Novel mono- and bimetallic organotin(IV) compounds as potential linkers for coordination polymers
A.-A. Someșan, I. Barbul, S.-M. Vieriu, R. A. Varga, C. Silvestru,
Dalton Trans., **2019**, *48*, 6527-6538.
DOI: 10.1039/c9dt00817a

7. Reaction of imidazoline-2-selone derivatives with mesityltellurenyl iodide: a unique example of a 3c-4e Se→Te←Se three-body system embedding a tellurenyl cation
M. C. Aragoni, M. Arca, A. J. Blake, E. Cadoni, L. O. Copolovici, F. Isaia, V. Lippolis, S. Murgia, A. M. Pop, C. Silvestru, J. P. Tidey, R. A. Varga,
New J. Chem., **2019**, *43*, 11821-11831.
DOI: 10.1039/C9NJ01593K

8. Hypercoordinated organotin(IV) compounds containing (imino)aryl ligands - [(*E*)-2-(2′,6′-$^{i}Pr_2C_6H_3N{=}CH)C_6H_4]SnR_2X$ (R = Me; X = Cl, I; R = ^{n}Bu, X = Cl, F, Br). Molecular structures and supramolecular aspects
C. Comsa, R. A. Varga, A. Soran, C. Silvestru,
Rev. Roum. Chim., **2020**, *65(6)*, 539-552.
DOI: 10.33224/rrch.2020.65.6.03

9. Synthesis and characterization of novel homobimetallic organotin(IV) compounds
A.-A. Someșan, I. Barbul, S.-M. Vieriu, R. A. Varga,
Rev. Roum. Chim., **2020**, *65(7-8)*, 725-733.
DOI: 10.33224/rrch.2020.65.7-8.11

10. Single source precursor for PAD-$LaMnO_3$ thin films
R. B. Sonher, R. A. Varga, M. Năsui, T. Petrișor. Jr, M. S. Gabor, M. Senila, A. Rufoloni, T. Petrișor, L. Ciontea
Crystals, **2020**, *10*, 851.
DOI: 10.3390/cryst10090851

11. Synthesis, structural characterization and in vitro antiproliferative effects of novel organotin(IV) compounds with nicotinate and isonicotinate moieties on carcinoma cells
S.-M. Vieriu, A.-A. Someșan, C. Silvestru, E. Licarete, M. Baciu, R. A. Varga,
New J. Chem., **2021**, *45*, 1020-1028.
DOI: 10.1039/d0nj05069e

12. Reactivity of a carbonyl moiety in organotin(IV) compounds. Novel Pd(II) and Cu(II) complexes supported by organotin(IV) ligands
A.-A. Someșan, C. Silvestru, R. A. Varga,
New J. Chem., **2021**, *45*, 3817-3827.
DOI: 10.1039/D0NJ06016J

13. *C,O*-Chelated organotin(IV) derivatives as potential anticancer agents: Synthesis, characterization, and cytotoxic activity
A.-A. Someșan, S.-M. Vieriu, A. Crăciun, C. Silvestru, P. Chiroi, A. Nutu, A. Jurj, R. Lajos, I. Berindan-Neagoe, R. A. Varga,
Appl. Organomet. Chem., **2022**, *36*, e6540.
DOI: 10.1002/aoc.6540

14. Supramolecular architectures in novel diphenyl(aryl)tin(IV) chlorides
C. Afloarei, I. Barbul, A.-A. Someșan, C. Silvestru, R. A. Varga,
Polyhedron, **2022**, *222*, 115894.
DOI: 10.1016/j.poly.2022.115894

15. Diaryllead(II) species stabilized by C,O-chelating ligands
A.-A. Someșan, R. A. Varga,
New J. Chem., **2022**, *46*, 20074-20077.
DOI: 10.1039/d2nj03796c

16. Organotin(IV) alkoxides, siloxides, and related stannoxanes. Characterisation and thermogravimetric studies
V. Penciu, L. Bizo, R. A. Varga, A.-A. Someșan,
ChemistryOpen, **2025**, e202400494.
DOI: 10.1002/open.202400494

17. 4-[2-(Chlorodiphenylstannyl)phenyl]-4-hydroxybutan-2-one
A.-A. Someșan, R. A. Varga,
Molbank, **2025**, *2025*, M1991.
DOI: 10.3390/M1991

D. Lucrări publicate în ultimii 10 anii în reviste şi volume de conferinţe cu referenţi (neindexate)

- Reviste

- Selecţie cu maximum 20 lucrări în volume de conferinţe

1. Multinuclear NMR –a useful tool in analysis of organotin(IV) compounds
A. A. Somesan, R. A. Varga, C. Silvestru,
The Central and Eastern European Bruker Users' Meeting, CEUM, 18 - 20.09.2016, Sofia, Bulgaria.

2. New nicotinate and isonicotinate organotin(IV)-compounds with potential biological activity S.-M. Vieriu, R. A. Varga, E. Licarete, M. Banciu,
a XXXV-a Conferință Națională de Chimie, Călimănești-Căciulata,Vâlcea (România) 2-5 octombie 2018, prezentare orală.

3. Compusi staniu(IV)-organici funcționalizați
R. A. Varga,
Zilele Academice Clujene, Cluj-Napoca (Romania), 18 - 21 Octombrie, 2018

4. Synthesis, characterization and potential biological activity of new organotin(IV) derivatives,
S.-M. Vieriu, R. A. Varga, E. Licarete, M. Banciu,
9th International Conference of the Chemical Societies of the South-East European Countries, Targoviște 2019, poster.

5. C,O-chelated organotin(IV) compounds as potential anticancer agents: synthesis, characterization and cytotoxic activity,
A. A. Somesan, R. A. Varga, C. Silvestru,
3rd Edition of the Young Researchers' International Conference on Chemistry and Chemical Engineering (YRICCCE III), Cluj-Napoca, Romania, 4th and 5th June 2021, prezentare orală.

6. Compuși staniu(IV)-organici polimetalici
R. A. Varga,
Zilele Academice Clujene, Cluj-Napoca (Romania), 21 - 22 Octmbrie, 2021

7. Novel organotin(IV) alkoxides – from synthesis to reactivity,
V. Penciu, A.-A. Someșan, R. A. Varga,
National Conference of Chemistry, XXXVII Edition, Târgoviște, 25-27 September, 2024.

E. Brevete obţinute în întreaga activitate

1.

Data: 01.07.2025

Semnătura:

A N E X A 4 . 1

Nume Prenume: **CARPA RAHELA**
Gradul didactic: Șef lucrări dr.

Instituția unde este titular: Univeristatea Babeș-Bolyai

Facultatea: de Biologie și Geologie
Departamentul: Biologie Moleculară și Biotehnologii

L I S T A
lucrărilor ştiinţifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

1. Doctorat (PhD) în Biologie (Microbiologie - *Cum Laude)*, **2004 – 2008**, Universitatea Babes-Bolyai, Facultatea de Biologie și Geologie, Cluj-Napoca, Romania. Titlul tezei: *Cercetări fiziologice şi moleculare asupra bacteriilor fixatoare de azot, libere, aerobe = Physiological and molecular research on the free, aerobic nitrogen fixing bacteria*. Coordonator științific: prof. univ. dr. Mihai Drăgan-Bularda.

B. Cărţi si capitole în cărţi publicate în ultimii 10 ani

B1. *Cărţi în editurile universităţilor din consorţiu sau în alte edituri din ţară:*

1. Farkas, A., **Carpa R.,** Butiuc-Keul, A., **2022,** *Biotehnologii Generale, Ghide de Lucrari Practice*, Ed. Presa Univ. Clujeana, ISBN: 978-606-37-1596-9, e-book.

2. Carpa R., 2020, *Biotehnologii în Industria Cosmetică, Lucrări Practice*, Ed. Presa Univ. Clujeană, 182 pp.

3. Carpa R., Dragan-Bularda M., Muntean V., **2014**, *Microbiologie Generală, Lucrări Practice*, Ed. Presa Universitară Clujeana, Cluj-Napoca, 217.

B2. *Capitole în cărţi, în edituri internaţionale:*

1. Dobrota CT, Butiuc-Keul A, **Carpa R, 2020,** Adaptive Strategies of *Betula* Species to Environmental Stress, In: Bertelsen C.T., Ed, *Betula* Ecology and Uses, Nova Science Publishers, New York, pp. 37-64.

2. Dejeu, C., **Carpa, R., 2020**, Ecological Impact of Hydropower Building Yards in Romania, In: Ed. Milanović Pešić, A., Jakovljević, D., Water Resources Management: Methods, Applications and Challenges, Nova Science Publishers, New York, pp. 153-194.

3. Mihaljevi, M., Dejeu, C.N., **Carpa, R.,** Mohl, A., **2025,** Chapter 12: Law and politics: Protected areas in the Danube River Basin e Implementation matters, in: Vol. Eds. Bloesch J., Cyffka B., Hein, T., Sandu, C., Sommerwerk, N., The Danube River and The Western Black Sea Coast Complex Transboundary Management, Elsevier, pp 253-270. ISBN: 978-0-443-18686-8, eBook ISBN: 9780443186875 https://doi.org/10.1016/B978-0-443-18686-8.00009-3

B3. *Capitole în cărţi, în edituri naţionale:*

4. **Carpa, R., 2021,** Microbiologia la Facultatea de Biologie și Geologie, Universitatea Babeș-Bolyai din Cluj-Napoca, în: Științele biologice din România, Coordonatori: Simionescu M., Popescu O., Ed. Academiei Române, pp. 311-317.

C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani

C1. *Articole publicate în reviste cotate ISI, ca autor principal:*

1. Paul, N. L., **Carpa, R.,** Ionescu, R. E., Popa, C.O. **2025,** The Biomedical Limitations of Magnetic Nanoparticles and a Biocompatible Alternative in the Form of Magnetotactic Bacteria. Journal of Functional Biomaterials, 16(7), 231. https://doi.org/10.3390/jfb16070231
2. Andreica, A.M., Balea, A., Pojar-Fenești, M., **Carpa, R., 2024,** GC-MS comparative chemical composition of essential oils and volatile compounds of *Eryngium planum* L. using classical hydrodistillation, ultrasound-assisted hydrodistillation and headspace solid-phase microextraction. Antimicrobial activity, Studia UBB Chemia, LXIX, 1, 147-161 DOI:10.24193/subbchem.2024.1.09
3. Oravetz, K.; Diaconeasa, Z.; **Carpa, R.;** Rakosy-Tican, E.; Cruceriu, D. **2024,** The Antioxidant, Antimicrobial, and Antitumor Proprieties of Flavonol-Rich Extracts from *Allium ursinum* (Wild Garlic) Leaves: A Comparison of Conventional Maceration and Ultrasound-Assisted Extraction Techniques. Int. J. Mol. Sci. 2024, 25, 12799. https://doi.org/10.3390/ijms252312799
4. Crintea, A., **Carpa R.,** Mitre, A.O., Pethő, R.I., Chelaru, V.F., Nădășan, S.M., Neamti, L., Dutu, A.G., **2023,** Nanotechnology involved in treating urinary tract infections: An overview, Nanomaterials, 13(3), 555; https://doi.org/10.3390/nano13030555
5. Balea A., Ciotlaus, I., Pojar-Fenesan, M., **Carpa, R., 2023,** Comparative chemical and antimicrobial characterization of non-ozonated and ozonated vegetable oils. Studia UBB Chemia, LXVIII, 1, 285-301. DOI:10.24193/subbchem.2023.1.21
6. **Carpa, R.,** Farkas, A.C., Dobrota, C., Butiuc-Keul, A.L., **2023**, Double network chitosan-based hydrogels with improved mechanical, conductive, antimicrobial and antibiofouling properties, Gels, 9(4), 278; https://doi.org/10.3390/gels9040278
7. Barbu, I.A., Ciorîță, A., **Carpa, R.,** Mot, A.C., Butiuc-Keul, A., Marcel Pârvu, M., **2023**, Phytochemical Characterization and Antimicrobial Activity of Several *Allium* Extracts, Molecules, 28 (10), 3980. https://doi.org/10.3390/molecules28103980
8. **Carpa, R.,** Remizovschi, A.; Culda, A-C; Butiuc-Keul A-L., **2022,** Inherent and composite hydrogels as promising materials to limit the antimicrobial resistance. Gels, 8, 70. https://doi.org/10.3390/gels8020070
9. Prodan D., Filip M., Vlassa, M., Moldovan, M., **Carpa, R., 2022**, Chromatographic profile of major whey proteins in some dairy beverages based on Milk Serum, Turkish Journal of Chemistry, 46: 6, Article 20. https://doi.org/10.55730/1300-0527.3497
10. Remizovschi A., **Carpa R., 2021**, Biologically-oriented mud volcano database: muddy_db, PeerJ 9:e12463 https://doi.org/10.7717/peerj.12463.
11. Paskucza S., **Carpa R.,** Culda C.A., Butiuc-Keul A.L., Dobrota C., Berchez O., Rusu T., **2021,** Biochemical composition of blackcurrant fruits in a plantation from Jibou area, AgroLife Scientific Journal, 10, 1, 179-185. ISSN 2285-5718; ISSN CD-ROM 2285-5726; ISSN ONLINE 2286-0126; ISSN-L 2285-5718
12. Bacali, C., **Carpa, R.;** Buduru, S.; Moldovan, M.L.; Baldea, I.; Constantin, A.; Moldovan, M.; Prodan, D.; Dascalu, L.M.; Lucaciu, O.; Catoi, F.; Constantiniuc, M.; Badea, M., **2021**, Association of Graphene Silver Polymethyl Methacrylate (PMMA) with Photodynamic Therapy for Inactivation of Halitosis Responsible Bacteria in Denture Wearers. Nanomaterials, 11, 1643. https://doi.org/10.3390/nano11071643

13. Dejeu C., **Carpa R.,** Remizovschi A., Bond, J., **2021**, The widespread alteration of rivers in the Romanian Carpathians and the undisturbed Râul Alb, River Research and Applications, https://doi.org/10.1002/rra.3770

14. Remizovschi, A., **Carpa R.,** Forray F.L., Chiriac, C., Roba, C.A., Beldean-Galea, S., Andrei, A.S., Szekeres, E., Baricz, A., Lupan, I., Knut, R., Coman, C., **2020**, Mud volcano and the presence of PAHs, Scientific Reports, 10:1253.

15. Bercean (Vitan), D.E., **Carpa R.,** Prodan, D., Moldovan, M., Borzan, C., **2020**, Preliminary study on scanning electron microscopy as an additional mean to assess the effectiveness of sterilization of endoscopes used in digestive tract examination, Revista de Chimie, 71, 2, 280-287.

16. Ungurean C., **Carpa R.,** Câmpean R., Maior M.C., Olah N.K., **2020,** Phytochemical and microbial analyses of *Berberis sp*. extracts, Romanian Biotechnological Letters, 25, 6, 2132-2139, DOI: 10.26327/RBL2018.232.

17. Popa, D., **Carpa R.,** Moldovan, M., Prodan, D., Varvara, S., Golumbeanu, M.; Popa, M., **2019,** Culturable bacterial communities from the spoiled walls of the heritage buildings, Journal of Environmental Protection and Ecology, 20 (2): 773-780.

18. Paskucza, S., **Carpa R.,** Culda, C.A., Rusu, T., **2019,** Physico-chemical parameters and enzymatic activities on tilled soils from Jibou area, Romania, Scientific Papers-Series A-Agronomy: 62 (1), 111-117.

19. Paskucza S., **Carpa R.,** Remizovschi, A., Rusu T., **2018**, Research on sulphur-bacteria and physical-chemical parameters from sulphurous waters of Jibou area, Scientific Papers. Series E. Land and Reclamation, Earth Observation&Surveying, Environmental Engineering, VII, 240-246.

20. Lupan I., **Carpa R.,** Oltean A.P., Kelemen B.S., Popescu O., **2017,** Release of Antibiotic Resistant Bacteria by a Waste Treatment Plant from Romania, Microbes and Environments, 32(3), 219-225. doi:10.1264/jsme2.ME17016.

21. Carpa R, Maior M.C., Dejeu C., **2017,** Romanian ecosystems need EU protection, Science, 358(6365):880-881. (*Letter*) DOI: 10.1126/science.aar2216

22. Orban M.G., Plugaru S., Rusu T., **Carpa R., 2017,** Researches and studies regarding the microbial indicators of water pollution of Castailor Creek, Bistrita, Scientific Papers. Series E. Land Reclamation, Earth Observation & Surveying, Environmental Engineering, VI, 39-44. DOI: 10.17930.

23. Carpa R., Keul, A., Muntean, V., Dobrotă, C., **2014**, Characterization of halophilic bacterial communities in Turda Salt Mine (Romania), Origins of Life and Evolution of Biosphere, 44, 3, 223-230.

C2. *Articole publicate în reviste cotate ISI, ca şi coautor:*

24. Andreica A.M., Vlassa, M.C., **Carpa, R.,** Petean, I., **2025**, Green synthesis of silver nanoparticles using *Galium verum* L. aqueous extract and evaluation of its antimicrobial activity, Studia UBB Chemia, LXX, 1, 87-100, DOI:10.24193/subbchem.2025.1.06

25. Safta D.A., Vlase, A.M., Pop A, Cherfan, J., **Carpa, R.,** Iurian, S., Bogdan, C., Vlase, L., Moldovan, M.L., **2025**, Optimized *Sambucus nigra L.*, *Epilobium hirsutum L.*, and *Lythrum salicaria* L. Extracts: Biological Effects Supporting Their Potential in Wound Care, Antioxidants, 14 (5), 521. https://doi.org/10.3390/antiox 14050521 AIS- 1.012

26. Muntean, A., Sarosi C., Petean, I., Cuc, S., **Carpa, R.,** Chis, I.A., Ilea, A., Delean, A.G., Moldova, M., **2024,** Developing bioactive hydrogels with peptides for dental application, Biomedicines 2024, 12, 694. https://doi.org/10.3390/biomedicines12030694

27. Mohajon, D.R., Prodan D., Moldovan, M., Petean, I., Cuc, S., Filip, M., **Carpa, R**., Gheorghe, G.F., Saroși, C.L., **2024,** Formulation and characterization of new experimental dental composites with zirconium filling in different forms, Materials, 17, 2711, https://doi.org/10.3390/ma17112711

28. Dobrota, C., Marian, A., **Carpa, R.,** Rosoiu, C.L., Forray, F.L., **2024,** Cavity ring down spectroscopy as a tool for monochromatic light action on tomato plants in bio-regenerative life support systems, Academy of Romanian Scientists, Annals Series on Biological Sciences, 13,1, 53-65, ISSN: 2285-4177. DOI 10.56082/annalsarscibio.2024.1.53

29. Dobrota, C.T., Florea, A.D., **Carpa, R.,** Soritau, O., Tomoaia, G., Ossi Horovitz, Mocanu, A., Rosoiu, C.L., Tomoaia-Cotisel, M., **2024,** Antimicrobial effect of toothpastes containing birch extract and nano-hydroxyapatites, Academy of Romanian Scientists, Annals Series on Biological Sciences, 13,1, 66-80, ISSN: 2285-4177. DOI 10.56082/annalsarscibio.2024.1.66

30. Prodan D., Moldovan, M., Cuc, S., Sarosi C.L., I Petean, I., Filip, M., **Carpa, R.,** Doukeh, R., Mirica, I.C., **2024,** Advanced Dentistry Biomaterials Graphene Oxide. Polymers, 16 (12), 1743. https://doi.org/10.3390/polym16121743

31. Polianciuc, S.I., Ciorîță, A., Soran, M.L., Lung, I., Kiss B., Ștefan, M.G., Leucuța, D.C., Gurzău, A.E., **Carpa, R.,** Colobatiu, L.M., Loghin, F., **2024,** Antibiotic Residues and Resistance in three Wastewater Treatment Plants from Romania, Antibiotics, 13, 8, 780. https://doi.org/10.3390/antibiotics13080780

32. Kirgiz M.S., Mirza, J., Cuc S., Prodan D., Sarosi C., Perhaita, I., **Carpa R.,** Moldovan, M., Popa D., Varvara S., Popa, M., **2023,** Physico-antibacterial feature and SEM morphology of bio-hydraulic lime mortars incorporating nano graphene oxide and binary combination of nano graphene oxide with nano silver, fly ash, zirconium, and titanium powders, Buildings, 13, 1, 172. https://doi.org/10.3390/buildings13010172

33. Popescu, V., Prodan D., Cuc, S., Saroşi, C., Furtos, G., Moldovan, A., **Carpa R.,** Bombos D., **2023,** Antimicrobial poly (lactic acid)/ copper nanocomposites for food packaging materials, Materials, 16(4), 1415; https://doi.org/10.3390/ma16041415

34. Crintea, A., Motofelea A.C., Șovrea, A.S., Constantin, A.M., Crivii, C.B., **Carpa, R.,** Dutu, A.G., **2023**, Dendrimers: Advancements and Potential Applications in Cancer Diagosis and Treatment-An Overview, Pharmaceutics, 15(5), 1406. https://doi.org/10.3390/pharmaceutics15051406

35. Vacar C.L., Ciorita A., Tudoran C., Podar D., **Carpa R.,** Leostean C.,Kacsa, I., Mircea, C. **2023,** Compact cold atmospheric pressure plasma cleaner suited for inhibiting bacterial biodeteriogens from paper archives, Journal of Cultural Heritage, 62, 198-205. https://doi.org/10.1016/j.culher.2023.05.027

36. Florea, A.-D., Dobrota, C.T., **Carpa, R.,** Racz, C.-P.; Tomoaia, G., Mocanu, A., Avram, A., Soritau, O., Pop, L.C., Tomoaia-Cotisel, M., **2023,** Optimization of Functional Toothpaste Formulation Containing Nano-Hydroxyapatite and Birch Extract for Daily Oral Care. Materials, 16, 7143. https://doi.org/10.3390/ma16227143

37. Florea, D.A., Dobrota, C.T., **Carpa, R.,** Riga, S., Tomoaia-Cotisel, M., **2022,** Current status and trends in oral health care technologies. A perspective review, International Journal of Medical Dentistry, 26, 1, 38-50.

38. Butiuc-Keul A-L., Farkas, A., **Carpa, R.,** Dobrota C., Iordache, D., **2022,** Development of smart fruit crops by genome editing, Turkish Journal of Agriculture and Forestry, 46, 129-140.

39. Farkas, A., Coman, C., Szekeres, E., Teban A., **Carpa**, R., Butiuc-Keul, A., **2022,** Molecular typing reveals environmental dispersion of antibiotic resistant enterococci under anthropogenic pressure, Antibiotics 11(9), 1213; https://doi.org/10.3390/antibiotics11091213.

40. Tisler, C.E.; Chifor, R., Badea, M.E.; Moldovan, M.; Prodan, D.; **Carpa, R.,** Cuc, S., Chifor, I.; Badea, A.F. **2022,** Photodynamic Therapy (PDT) in Prosthodontics: Disinfection of Human Teeth Exposed to *Streptococcus mutans* and the Effect on the Adhesion of Full Ceramic Veneers, Crowns, and Inlays: An *In Vitro* Study. Biomedicines, 10, 144. https://doi.org/10.3390/biomedicines10010144

41. Pop (Cherfan), A., Bogdan C., Fizesan, I., Iurian, S., **Carpa, R.,** Bacali C., Vlase, L., Benedec, D., Moldovan, M.L. **2022,** *In vitro* evaluation of biological activities of canes and pomace extracts from several varieties of *Vitis vinifera* L. for inclusion in freeze-drying mouthwashes, Antioxidants, 11(2), 218; https://doi.org/10.3390/antiox11020218

42. Purcea Lopes, P.M., Moldovan, D., Moldovan, M., **Carpa, R.,** Saroşi, C., Păşcuţă, P., Mazilu Moldovan, A., Fechete, R., Popescu, V., **2022,** New composite hydrogel based on whey and gelatin crosslinked with copper sulphate, Materials, 15, 2611. https://doi.org/10.3390/ma15072611

43. Butiuc-Keul, A., **Carpa, R.,** Podar, D. Szekeres E., Muntean V., Iordache D., Farkas A., **2021**, Antibiotic Resistance in *Pseudomonas spp*. Through the Urban Water Cycle. Curr Microbiol., 78(4):1227-1237. doi: 10.1007/s00284-021-02389-w.

44. Dobrota, C.T., **Carpa, R.,** Butiuc-Keul, A. **2021**, Analysis of designs used in monitoring crop growth based on remote sensing methods. Turkish Journal of Agriculture and Forestry. doi: 10.3906/tar-2012-79

45. Ciorîță A, Zăgrean-Tuza C, Moț AC, **Carpa R.,** Pârvu M. **2021,** The Phytochemical Analysis of *Vinca* L. Species Leaf Extracts Is Correlated with the Antioxidant, Antibacterial, and Antitumor Effects. Molecules. 26(10):3040. https://doi.org/10.3390/molecules26103040

46. Iurian S.M., Adespei D.R., Pop A., Fizeșan I., **Carpa R.**, Moldovan M.L., Loghin F., Achim M., Bogdan C., **2021**, Development of a mouthwash using freeze-drying technique: an optimization study, Applied Sciences, 11(20), 9609; https://doi.org/10.3390/app11209609.

47. Mazilu (Moldovan) A., Popescu V., Sarosi C., Silaghi-Dumitrescu R., Chisnoiu A.M., Moldovan M., Silaghi Dumitrescu L., Prodan D., **Carpa R.,** Gheorghe G.F., Chisnoiu R.M., **2021**, Preparation and *in vitro* characterization of dental whitening gels based on bromelain, whey and quince extract, Gels, 7(4), 191; https://doi.org/10.3390/gels7040191.

48. Butiuc-Keul, A., Farkas, A., **Carpa R.,** Iordache, D., **2021**, CRISPR-Cas system: The powerful modulator of accessory genomes in Prokaryotes, Microbial Physiology, https://doi.org/10.1159/000516643

49. Prodan D., Moldovan M., Furtos G., Saroși C., Filip M., Perhaita I., **Carpa R.**, Popa M., Cuc S., Varvara S., Popa D., **2021**, Synthesis and characterization of some graphene oxide powders used as additives in hydraulic mortars. Appl. Sci., 11(23), 11330; https://doi.org/10.3390/app112311330

50. Moldovan, M., **Carpa, R.,** Fizeșan, I., Vlase, L., Bogdan, C., Iurian, S., Benedec D., Pop, A., **2020**, Phytochemical profile and biological activities of tendrils and leaves extracts from a variety of *Vitis vinifera* L. Antioxidants, 9, 5, 373-393. https://doi.org/10.3390/antiox9050373

51. Dascalu, L.M.; Moldovan, M.; Prodan, D.; Ciotlaus, I.; Popescu, V.; Baldea, I.; **Carpa, R.,** Sava, S.; Chifor, R.; Badea, M.E., **2020,** Assessment and Characterization of Some New Photosensitizers for Antimicrobial Photodynamic Therapy (aPDT). Materials, 13, 3012.

52. Dascalu, L.M.; Moldovan, M.; Prodan, D.; Ciotlaus, I., **Carpa, R.,** Ene R., Sava, S.; Chifor, R.; Badea, M.E., **2020,** Antimicrobial activity and chemical composition of two experimental gels based on essential oils, Studia UBB Chemia 65, 2, 57 – 67.

53. Toth P., **Carpa, R.,** Iordache D.D., Culda C.A., Keul A.L., Roba C.A., Roșu C.D., **2020,** Quality assessment of drinking water from several private wells from Lazuri village (Satu Mare County, Romania), Journal of Environmental Protection and Ecology, 21, 1, 106 – 115.

54. Bacali C., Olteanu D., **Carpa R.,** Moldovan M., Filip A., Baldea I., **2019,** Flexural Strength, Biocompatibility and Antimicrobial Activity of a Polymethyl Methacrylate Denture Resin Enhanced with Graphene and Silver Nanoparticles, Clinical Oral Investigations, https://doi.org/10.1007/s00784-019-03133-2.

55. Podar D., Macalik K., Réti K.O., Martonos I., Török E., **Carpa R.,** Weindorf D.C., Csiszar J., Szekely G., **2019**, Morphological, physiological and biochemical aspects of salt tolerance of halophyte *Petrosimonia triandra* grown in natural habitat, Physiology and Molecular Biology of Plants, 25 (6), 1335-1347.

56. Gherman T., Popescu V., **Carpa R.,** Rapa M., Gavril G.L., Dudescu M.C., Bombos D., **2018,** Potential use of *Galium verum* essential oil for antibacterial properties in gelatin based hydrogels prepared by microwave irradiation technique. Revista de Chimie, 69 (3), 575-580.

57. Gherman T., Popescu V., **Carpa R.,** Gavril G.L., Rapa M., Oprescu E.E., **2018,** *Salvia officinalis* essential oil loaded gelatin hydrogel as potential antibacterial wound dressing materials, Revista de Chimie, 69 (2), 410-414.

58. Moldovan, M., Prodan D., Sarosi C., **Carpa R.,** Socaci C., Rosu, M.C., Pruneanu, S., **2018,** Synthesis, morpho-structural properties and antibacterial effect of silicatebased composites containing graphene oxide/hydroxyapatite, Materials Chemistry and Physics, 217, 48–53.

59. Popa, D., Varvara S., Moldovan M., Prodan D., **Carpa R.,** Varsta A., Popa M., **2018**, Study on the importance of physicochemical characteristics from the walls in the rehabilitation works of heritage buildings, Journal of Environmental Protection and Ecology, (Environmental protection and sustainable development) 19, (3), 1166–1174.

60. Moldovan M., Prejmerean C.A., Prodan D.F., Silaghi Dumitrescu L., **Carpa R.,** Pruneanu S, Sarosi L.C., **2017** Antibacterial activity and flexural strength for experimental composites with grapheme, Dental Materials, 33:e54-e55, DOI: 10.1016/j.dental.2017.08.107.

61. Orasan O., Orasan R., Saplonţai-Pop A., Filip M, **Carpa R.,** Sarosi L.C., Moldovan M., Man S.C., **2017,** Antimicrobial activity and thiosulfinates profile of a formulation based on *Allium cepa* L. extract, Open Chemistry. 15, 175-181.

62. Lupan I., Ianc M.B., Kelemen B.S., **Carpa R.,** Rosca-Casian O., Chiriac M.T., Popescu O., **2014**, New and old microbial communities colonizing a seventeenth-century wooden church, Folia Microbiologica, 59 (1) 45-51.

C3. *Articole publicate în reviste indexate BDI, ca autor principal:*

1. Barbu, I.A., **Carpa, R**., Biro, O.M., Pârvu, M., **2025,** Antimicrobial effects produced by gold nanoparticles obtained with extracts of *Allium sativum* and *Allium ursinum*, Studia Universitatis Babeş – Bolyai, Biologia, 70, 1, 327-336. doi:10.24193/subbbiol.2025.1.15

2. Carpa, R., Farkas A., 2024, In Memoriam, Vasile Muntean, PhD, Associate professor to Faculty of Biology and Geology, Babeș–Bolyai University Studia Universitatis Babeş – Bolyai, Biologia 69, 2, 2024 (p. 193-197).

3. Carpa R., Remizovschi A., Burtescu R.F., Culda C.A., Kryvtsova M., Hasynets Y., Butiuc-Keul A., Dobrota C., Farkas A., Olah, N.K., **2022,** Salicin content from *Salix alba* L. and *Salix purpurea* L. extracts and its antibacterial effects, Contributii Botanice, 57, 23-36.

4. Mirea, D.R., Rosalim, M.E., **Carpa, R., 2019,** *Staphylococcus* infections: methicillin high-resistance and incidence based on environmental factors and individual characteristics of the patients, Scientific Studies and Research. Biology (SSRB), Bacau, 28, 2, 22-27.
5. Culda C.A., **Carpa R.,** Dejeu, C., Butiuc A.L., **2019,** Microbial activity in mountain soils from Făgăraș zone, Studia Universitatis UBB, Biologia, 64, 2, 55-66
6. Carpa R., Cândea, A., Remizovschi, A., Barbu-Tudoran L., Maior M.C., **2018**, Cellulase production and morphology of *Trichoderma reesei* in different experimental conditions, Studia Universitatis Babeș-Bolyai, Biologia, 63, 2, 115-129.
7. Remizovschi A., **Carpa R.,** Drăgan-Bularda, M., **2018**, Biological and geological traits of terrestrial mud volcanoes – a review, Analele Universitatii din Oradea - Fascicula Biologie, Tom XXV, 2, 102-114.
8. Carpa R., Remizovschi A., **2018**, Bioluminescent assay for viability of *Azotobacter* sp. from different environments, SSR Biology, Bacau, 27, 2, 49-54.
9. Carpa R., Reti K.O., Macalik K., Torok E., Remizovschi A., Szekely G., **2017,** Influence of salt content on enzymatic activities and halophytes distribution in Cojocna zone, Romania, Studia Univ. Babeş-Bolyai, Biologia, LXII, 2, 21-32. doi:10.24193/subbbiol.2017.2.02.
10. Carpa R., Dumitru D.V., Burtescu R.F., Maior M.C., Dobrota C.T., Olah N.K., **2017,** Bio-chemical analysis of *Datura stramonium* extract, Studia Univ. Babeş-Bolyai, Biologia, LXII, 2, 5-19. doi: 10.24193/subbbiol.2017.2.01
11. Dumitru D.-V., Campean R., Olah N.-K., **Carpa R., 2016,** Biological analysis of *Ginkgo biloba* extract. ELBA Bioflux 8(2):34-43.
12. Samasca G., Deleanu D., Sur G., Lupan I., Alexandru G., **Carpa R., 2016,** Is it necessary to screen *Helicobacter pylori* infection in patients with celiac disease and iron deficiency?, Gastroenterology and Hepatology from Bed to Bench, 9(4):345.
13. Lupan I., Pirvan A., Sur G., Samasca G., Deleanu D., Abrudan C., Alexandru G., **Carpa R., 2016,** Immunopathology of pediatric celiac disease associated with *Helicobacter pylori* infection, International Journal of Celiac Disease,4 (3): 80-81.
14. Fetke R., **Carpa R.,** Drăgan-Bularda M., **2015,** Sanitary parameters of water from Secu and Valiug dam reservoirs, Caraș-Severin county, Romania., Analele Universităţii Oradea, Fascicula Biologie, Tom. XXII, 2, 63-69.
15. Carpa R., Mureșanu M., Maior M. C., Drăgan-Bularda M., **2014**, Enzymatic activity in soil samples from Gilău and Florești transect, Cluj, Romania, ELBA Bioflux 6 (2): 94-100.
16. Fetke R., **Carpa R.,** Drăgan-Bularda M., **2013,** Enzymatic activities in sediments from Secu and Văliug-Gozna dam reservoirs, Caraș-Severin, Romania. ELBA Bioflux 5 (2):93-102.

C4. *Articole publicate în reviste indexate BDI, ca şi contributor:*

17. Sur, G., Sur, L., Girbovan, A., Samasca, G., Alexandru, G., **Carpa R.,** Lupan, I. **2017,** Could *Helicobacter pylori* cause an abnormal immune response? Gastroenterology and Hepatology from Bed to Bench, 10 (3), pp. 242-243.
18. Reti K.-O., Macalik K., **Carpa R.,** Kis E., Szekely G., **2016,** Physico-chemical properties of soils populated with wild halophytes in some Romanian areas, Studia Univ. Babeş-Bolyai, Biologia, LXI, 2, 107-116.
19. Farkaş A., **Carpa R.,** Muntean V., Drăgan-Bularda M., **2012**, Spatial and temporal variations of enzymatic activity in biofilms occurring into a drinking water treatment plant in Cluj, Romania, Studia Univ. Babeş-Bolyai, Biologia, LVII, 1, 83-98.

20. Diaconescu I., Alexandru G., **Carpa R.,** Lupan I., Crisan C., Sur L., Sur G., Girbovan A., **2016,** Too few studies provided a link between viral infections and celiac disease, International Journal of Celiac Disease, 4(4): 135-137.

D. Lucrări publicate în ultimii 10 anii în reviste şi volume de conferinţe cu referenţi (neindexate)

- Reviste

D1. *Articole publicate în alte reviste, ca autor principal:*

1. Cîmpean P.R., Barbu, A.I., **Carpa R., 2023**, Characterization and applications of digital pcr (dpcr) and real time pcr (qpcr) in microbiology. Stud. Cercet. Biol., Bistrița, 27-28, pp 23-33.

2. Carpa R., Faekas, A., **2023**, Short description of bacillary dysentery produced by *Shigella spp*. Stud. Cercet. Biol., Bistrița, 27-28, pp 57-63.

3. Carpa, R., Remizovschi, A.; Culda, A-C; Butiuc-Keul A-L., **2022,** Cover page la Issue Gels, 8, 2, ISSN 2310-2861.

4. Dejeu, C., Sandu C., Schwarz U., **Carpa R., 2022**, Developing hydropower plants in nature protected areas – the case of hydropower complex in Jiu Gorge, Romania, Danube News, 24, (June 2022), 45, 7-10, ISSN: 2070-1292, https://www.danube-iad.eu.

5. Cioloca, A.T., **Carpa R., 2021**, The importance of vitamic A in cosmetic products, Studii și Cercetări, Biology, Bistrița, 26, 11-21.

6. Culda, C.A., **Carpa R., 2020**, Characterization of aromatic species implicated in various phytotherapies, Studii și Cercetări, Biology, Bistrița, 25, 3-14.

7. Carpa R., Horga, M., **2019,** *Laudatio* prof. univ. dr. Martin Keul, Stud. Cercet. Biol., Bistrița, 24, 36- 50.

8. Scrob S., Scrob I., **Carpa R., 2019**, Indigenous and pathogenic microbiota on the skin level, Stud. Cercet. Biol., Bistrița, 24, 36- 50.

9. Carpa R., Horga, M., **2018,** *Laudatio* prof. univ. dr. Mihail Dragan Bularda, Stud. Cercet. Biol., Bistrița, 23, 1-2.

10. Costînaș M.M., Alexa S., **Carpa, R., 2018,** Cultural and biochemical properties of *Escherichia coli, Proteus mirabilis* and *Klebsiella pneumoniae* strains from urinary infections, Stud. Cercet. Biol., Bistrița, 23, 14-22.

11. Zsisku, K.I., **Carpa R., 2018**, The action of environmental factors on the condition of the facial skin, Stud. Cercet. Biol., Bistrița, 23, 32- 39.

12. Mirea D.R., Rosalim M.E., **Carpa R., 2018**, The characterization of *Staphylococcus* species associated with human infections, Stud. Cercet. Biol., Bistrița, 23, 11-26.

13. Ungurean C., **Carpa R., 2016,** Berberine – an isoquinoline alkaloid from *Berberis* sp. Stud. Cercet. Biol., Bistrița, 21, 12-25.

14. Florea A., **Carpa R., 2015,** Detection methods for indicator microorganisms in drinking water – a review, Stud. Cercet. Biol., Bistrița, 20, 53-62.

15. Bora C., **Carpa R., 2015,** Infections associated with human immunodeficiency virus infection-A short review, Stud. Cercet. Biol., Bistrița, 20, 43-52.

E. Brevete obţinute în întreaga activitate

- brevete depuse

1. Popa D., Prodan D.F., Moldovan M., Saroși C.L., Cuc S., Popa M., Varvara C.S., Ivan O.R., **Carpa R.**, Furtos G., Mortar hidraulic cu aditivi pe baza de pulberi cu oxid de grafena, Nr. Inregistrare: 138108 A2, An**: 2024** Publicat in Buletin Oficial de Proprietate Industriala nr. 4 2024.

Data: 01.07.2025 **Semnătura:**

A N E X A 4 . 1

Nume Prenume: **Casoni Dorina**

Gradul didactic: Lector

Instituția unde este titular: Universitatea Babeș-Bolyai

Facultatea: Chimie și Inginerie Chimică

Departamentul: Chimie

L I S T A
lucrărilor ştiinţifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

Domeniul: Chimie

Titlul tezei: *Determinarea prin metode cromatografice a lipofilicităţii unor compuşi din clasa aditivilor alimentari* (data susţinerii: 14.05.2010) Universitatea Babes-Bolyai, Cluj-Napoca

Conducător de doctorat: Prof. Univ. Dr. Teodor Hodișan. Facultatea de Chimie și Inginerie Chimică, Universitatea Babes-Bolyai, Cluj-Napoca, Romania.

B. Cărţi si capitole în cărţi publicate în ultimii 10 ani

B1. ***Titlu carte*: Metode de Imagistică elementală și moleculară**.
Autori: Tiberiu Frențiu, Dorina Casoni. Presa Universitară Clujeană, 2019, ISBN 978-606-37-0584-7 (354 pagini)

C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani

C1. Büker E., Kayabas Avsar A., Yildirim E., Casoni D., Cobzac, S.C.A., Cimpoiu C., *Unveiling the Potential of Three Endemic Gypsophila L. (Caryophyllaceae) Taxa as Promising Carbonic Anhydrase Inhibitors-Bio-Metabolic Profiles and In Vitro Evaluation of Enzyme Inhibition and Antioxidant Capacity*, **Antioxidants** 14(2) (2025). DOI: 10.3390/antiox14020219

C2. Dinç E., Ari B.,; Büker E., Casoni, D., *Chemometric smart approaches using artificial neural networks and continuous wavelet transform for simultaneous quantitative analysis of ciprofloxacin -ornidazole tablets*, **Studia UBB Chemia**, LXX (2025) 203-219 . DOI: 10.24193/subbchem.2025.1.14

C3. Büker E., Casoni D*., Szasz, M.C, Cobzac, S.C.A., *New method for rapid detection and simultaneous determination of prohibited adrenergic drugs in sports using thin layer*

chromatography and image processing, **Journal of Liquid Chromatography** 47 (2024) 360-367. DOI:10.1080/10826076.2024.2386320

C4. Casoni D*., Cobzac S.C.A., Simion I.M., *Feasibility of UV-Vis spectroscopy combined with pattern recognition techniques to authenticate the medicinal plant material from different geographical areas*, **Journal of Analytical Science and Technology** 15(17) (2024) DOI: 10.1186/s40543-024-00428-2

C5. Torok A. I., Casoni D., Senila M., Tanaselia C., Covaci E., Hoaghia M.-A., Neag E., Cadar, O., Levei E. A., Arghir R., Moldovan O.T., Constantin S., Frentiu T., *Spatial variability and hydro/geochemical profiling of the elemental composition of mineral deposits and drip water from caves using unsupervised chemometric modelling*, **Chemical Geology** 646 (2024) 121903

C6. Apan A., Casoni D., Leonte D., Pop C., Iaru I., Mogos C., Zaharia V., *Heterocycles 52: The Drug-Likeness Analysis of Anti-Inflammatory Thiazolo[3,2-b][1,2,4]triazole and Imidazo[2,1-b][1,3,4]thiadiazole Derivatives*, **Pharmaceuticals** 17 (2024) 295. https://doi.org/10.3390/ph17030295

C7. Baumli J., Antal N., Casoni D., Cimpoiu C., *Use of Secondary Metabolites Profiling and Antioxidant Activity to Unravel the Differences between Two Species of Nettle*, **Plants** 12 (2023) 3233

C8. Szasz M., Casoni D., Cimpoiu C., *Study on binding affinity profile, bioactivity, and lipophilicity of selected antipsychotic drugs*, **Journal of Liquid Chromatography & Related Technologies** (2023) DOI10.1080/10826076.2023.2216780

C9. Scrob T., Varodi S.M ., Vintila G. A., Casoni D, Cimpoiu C., *Estimation of degradation kinetics of bioactive compounds in several lingonberry jams as affected by different sweeteners and storage conditions*, **Food Chemistry X**, 16 (2022) 100471.

C10. Scrob T., Covaci E., Hosu A., Tanaselia C., Casoni D., Torok A.I., Frentiu T., *Effect of in vitro simulated gastrointestinal digestion on some nutritional characteristics of several dried fruits*, **Food Chemistry,** 385 (2022) 132713.

C11. Casoni D., Simion I. M., Cobzac S.C.A., Kiraly A.G., *Development of a new micro-HPTLC protocol for total antioxidant potential determination of redox-active drugs*, **Studia UBB Chemia** 67(4) (2022) 235-247.

C12. Cobzac S.C.A., Olah N. K., Casoni D*., *Application of HPTLC Multiwavelength Imaging and Color Scale Fingerprinting Approach Combined with Multivariate Chemometric Methods for Medicinal Plant Clustering According to Their Species*, ***Molecules*** *26*(23) (2021) 7225.

C13. Torok A. I., Levei E. A, Constantin S., Moldovan O. T., Senila M., Cadar O., Casoni D., Angyus S. B, Tanaselia C., Covaci E., Frentiu T., *Application of inductively coupled plasma spectrometric techniques and multivariate statistical analysis in the hydrogeochemical profiling of caves—Case study Cloșani, Romania*, ***Molecules*** *26*(22) (2021) 6788.

C14. Cobzac S.C.A., Frentiu T., Balabanova B., Ruzdik N., Casoni D., *Regional pattern and characteristics of essential elements in several medicinal plants using spectrometric methods combined with multivariate statistical approaches,* **Studia Studia UBB Chemia,** LXVI 2 (2021) 9-22.

C15. Casoni D., Badea M., Cobzac S.C.A, Fish roe sample preparation for synthetic foor dyes determination by HPTLC, **Studia UBB Chemia** LXVI 2 (2021) 265-275.

C16. Simion I. M., Casoni D.*, Sârbu C., *Multivariate color scale image analysis–thin layer chromatography for comprehensive evaluation of complex samples fingerprint*, **Journal of Chromatography B** 1170 (2021) 122590.

C17. Coman F. M., Leonte D., Toma A., Casoni D., Vlase L., Zaharia V., *Heterocycles 51: Liphophilicity investigation of some thiazole chalcones and aurones by experimental and theoretical methods*, **Journal of Separation Science** 43 (2020) 2784–2793

C18. Casoni D., Ponta M., Bibica M.N., Lazar I. V., Frentiu T., *A free non-spectral interferences method based on inductively coupled plasma optical emission spectrometry for multielemental determination in multimineral/multivitamin preparations*, **Revue Roumaine de Chimie** 65(6) (2020) 573-578.

C19. Cobzac S.C.A, Casoni D., Badea M., Balabanova B., Ruzdik N., *Ultraviolet-visible (UV-Vis) spectroscopy and cluster analysis as a rapid tool for classification of medicinal plants*, **Studia Studia Studia UBB Chemia** 64(4) (2019) 191-203.

C20. Casoni D*., Badiu R. R., Frentiu T., *Spectrophotometric determination and assessment of potential health risk of nitrite from meat and processed meat products*, **Studia Studia UBB Chemia,** LXIV 2 (2019) 265-277

C21. Casoni D., Simion I.M., Sârbu C., *A comprehensive classification of edible oils according to their radical scavenging spectral profile evaluated by advanced chemometrics*, **Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy** 213 (2019) 204-209.

C22. Simion I.M., Casoni D., Sârbu C., *Classification of Romanian medicinal plant extracts according to the therapeutic effects using thin layer chromatography and robust chemometrics*, **Journal of Pharmaceutical and Biomedical Analysis** 163 (2019) 137-143.

C23. Simion I.M., Casoni D., Sârbu C., *Characterization and classification of medicinal plants according to their antioxidant profile estimated by thin layer chromatography assisted by chemometric expertise*, **Journal of Liquid Chromatography & Related Technologies** 41(6) 2018 342-348.

C24. Dragan O., Tomuta I., Casoni D., Sarbu C., Campian R., Frentiu T., *Influence of mixed additives on the physicochemical properties of a 5.25% sodium hypochlorite solution: an unsupervised multivariate statistical approach*, **Journal of Endodontics** 44 (2), (2018) 280-285.

C25. Casoni D., Badea M, Bros I., Cobzac S. C. A., *Investigation on image processing parameters for plate evaluation in TLC analysis of mycotoxins*, ***Studia*** **Studia Studia UBB Chemia** LXII (3) (2017) 89-102.

C26. Casoni D., Olah N., Soran L., Cobzac S.C.A., *Comparison of different extraction techniques for the evaluation of polyphenols content in Summer savory extracts*, **Studia Studia Studia UBB Chemia** LXII (3) (2017) 45-56.

C27. Simion I.M., Cobzac S.C.A Casoni D., *Image analysis approaches to improve the thin layer chromatography-chemometric based investigations of natural extracts*, **Studia Studia UBB Chemia** LXII, 2 (Tom I) (2017) 67-80.

C28. Casoni D., Sârbu, C., *Chromatographic approach for the evaluation of radical-scavenging activity using a new time-monitoring image analysis method*, **Journal of Planar Chromatography - Modern TLC** 29 (2016) 299-305.

C29. Turdean, G.L. , Casoni D., Sârbu, C., *Structure-electrochemical properties correlations of some phenol derivatives investigated by electrochemical techniques*, **Journal of the Iranian Chemical Society** 13 (2016) 945-956.

C30. Toma, A., Leonte, **D**., Zaharia, V., Sârbu, C., **Casoni**, **D**. *Heterocycles 37. Lipophilicity of new polyheterocyclic schiff bases and mannich bases estimated by thin-layer chromatography and computational methods*, **Revue Roumaine de Chimie**, 60 (2015) 677-687.

C31. Silai I.E. Fort I. C., Casoni D., Turdean G. L., *Epinephrine detection at Pt-nanoparticles modified graphite electrode by square-wave voltammetry*, **Revue Roumaine de Chimie** 60 (2015) 689-696.

D. Lucrări publicate în ultimii 10 anii în reviste şi volume de conferinţe cu referenţi (neindexate)

- Llucrări în volume de conferinţe

1. Eda Büker, Dorina Casoni, Investigating the in-vitro diuretic activity and rosmarinic acid content of extracts from Olea europaea L. Ayvalik and Olea europaea L. Gemlik for potential health and medicinal purposes, **International Conference on Nanobiotechnology and Pharmacy (ICNANOP - 2024),** 9- 10 Iulie, 2024, Istanbul, Turcia.
2. Dorina Casoni, Melinda Carmen Szasz, Ileana-Maria Simion, *Sensitive HPTLC method for simultaneous determination of adrenergic drugs prohibited in sport*, **27th International Symposium on Separation Sciences** (ISSS 2023), September 24th -27th, 2023, Cluj-Napoca, Romania.
3. Casoni Dorina, Mureșan Angelica-Silvia, *New approach for the in-vitro evaluation of antioxidant potential of medicinal plants extracts using Thin-Layer Chromatography assisted by Image Analysis*, **26th International Symposium for High-Performance Thin-LayerChromatography,** 9–11 Septembrie 2024, Budapesta, Ungaria.
4. Cobzac Simona, Casoni Dorina, *Characterization of some pepper hydroalcoholic extracts by using thin layer chromatography coupled with image analysis*, **26th International Symposium for High-Performance Thin-LayerChromatography,** 9–11 Septembrie 2024, Budapesta, Ungaria
5. Dorina Casoni, Larisa Silvești, *Evaluation of substrate-interaction effect on the antioxidant potential of adrenergic drugs using thin-layer chromatography with image analysis method*, **50th International conference of Slovak Society of Chemical Engineering – SSCHE 2024,** Tatranské Matliare, Slovakia, 20-24 May, 2024.
6. Cobzac Simona Codruța Aurora, Casoni Dorina, *Evaluation of the antioxidant activity of medicinal plants extracts based on the antiradical efficiency parameters determined by spectrophotometric assays***, 50th International conference of Slovak Society of chemical Engineering, SSCHE,** Tatranske Matliare, Slovacia, 20-24 Mai, 2024
7. Simona Codruta Aurora Cobzac, Dorina Casoni, *Determination of antioxidant potential of some medicinal plants extracts based on the* $ABTS^{\bullet+}$ *separation using micro-HPTLC-IA*, **49th International Conference of SSCHE**, Tatranske Matliare, Slovacia, 15 - 18 May, 2023.

8. Dorina Casoni, Ileana-Maria Simion, Melinda Carmen Szasz, *New chromatographic approach for rapid evaluation of antioxidant potential of adrenergic dugs*, **49th International Conference of SSCHE**, Tatranske Matliare, Slovakia, 15 - 18 May, 2023.
9. Eniko Covaci, Dorina Casoni, Simona Codruța Aurora Cobzac, *Elemental profile and antioxidant potential of selected medicinal plants from Romanian flora,* **49th International Conference of SSCHE**, Tatranske Matliare, Slovacia, 15 - 18 May, 2023.
10. Cobzac Simona Codruța Aurora, Casoni Dorina, *Potential use of micro-HPTLC-IA for the antioxidant activity evaluation of some medicinal plant extract from Romanian flora,* **7th International Symposium on Phytochemicals in Medicine and Food,** August 2 – August 7, 2023, Beijing, China.
11. Casoni Dorina, Cobzac Simona Codruța Aurora, Hosu Anamaria Delia, *New micro-HPTLC method assisted by image analysis for rapid determination of total antioxidant potential of medicinal plants extracts***, 16th World Congress on Polyphenols Applications**, September 28-29, 2023, Corinthia Palace, Malta.
12. Dorina Casoni, Alexandra-Gabriela Kiraly, Simona Codruța Cobzac, *New method for rapid identification and determination of selective adrenergic drugs using the micro-TLC approach*, **Conferința Națională de Chimie, Ediția XXXVI**, Călimănești-Căciulata, 04-07 octombrie 2022.

E. Brevete obţinute în întreaga activitate

Data: **Semnătura:**

01.07.2025

Instituția de învățământ superior: Universitatea Babeș-Bolyai

Facultatea: Biologie și Geologie

Domeniul de licență: Științe inginerești aplicate

Programul de studii de licență: Biotehnologii industriale

Perioada evaluării: 2020-2025

TABEL PRIVIND INDEPLINIREA INDICATORULUI

Activitatea științifică în domeniul disciplinelor

„Cadrele didactice titulare* au pregătirea inițială, sunt doctori / doctoranzi şi cercetează în domeniul în care se includ disciplinele din postul ocupat.”

Nr. crt.	Gradul didactic, numele şi prenumele titularului vârsta / vechimea în învăţământul superior	Disciplinele din cadrul programului de studii incluse în postul didactic şi tipul activităţii desfăşurate (curs, seminar, lucrări, proiect)	**Competenţa cadrului didactic titular în disciplinele din postul didactic**			Constatări privind îndeplinirea indicatorului conform Anexei 4.1
			Universitatea/ facultatea/ specializarea absolvită	Specializarea la masterat/ doctorat	Numărul de cărţi, numărul de lucrări ştiinţifice, numărul de brevete în domeniul disciplinelor din postul didactic (conform Anexelor 4.1.)	
0	***1***	***2***	***3***	***4***	***5***	***6***
1.	Șef lucrări Dr. Ciorîță Alexandra 32 / 7	Culturi de celule, curs și lucrări practice	Universitatea Babes-Bolyai Cluj-Napoca / Facultatea de Biologie si Geologie/Biologie Medicală	Doctorat în Biologie	1 Teză doctorat (A) 50 lucrări indexate ISI/BDI publicate în ultimii 10 ani (C) 1 Brevet de invenție (E1)	Îndeplinit

* Din statul de funcţii cumulativ al tuturor disciplinelor şi tuturor activităţilor didactice desfăşurate în cadrul programului de studii evaluat.

Rector,
Prof. univ. dr. Adrian-Olimpiu PETRUSEL

Persoana de contact,
Conf. dr. Dorina PODAR

A N E X A 4 . 1

Nume Prenume: Ciorîță Alexandra
Gradul didactic: Șef lucrări

Instituția unde este titular: Universitatea Babeș-Bolyai

Facultatea: Biologie și Geologie
Departamentul: Biologie moleculară și Biotehnologie

L I S T A
lucrărilor ştiinţifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

Extracte vegetale de *Vinca* și *Catharanthus* și utilizări ale potențialului terapeutic; susținere publică 3 septembrie, 2021, Ordin de Ministru 31 decembrie, 2021, Diplomă de doctor 7 martie, 2022; calificativ: Summa Cum Laude; http://www.editura.ubbcluj.ro/bd/ebooks/pdf/3487.pdf

B. Cărţi si capitole în cărţi publicate în ultimii 10 ani

Nu este cazul.

C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani

[1] I. A. Brezeștean, D. Marconi, A. Colniță, A. Ciorîță, S. C. Tripon, Z. Vuluga, M. C. Corobea, N. E. Dina, I. Turcu Chemosensors. 2022, 11, 28.
[2] A. Ciorîță, M. Bugiel, S. Sudhakar, E. Schäffer, A. Jannasch Cytoskeleton. 2021, 78, 177-184.
[3] A. CIORÎȚĂ, R. GUTT, I. LUNG, M. L. SORAN, M. PÂRVU. 2021.
[4] A. Ciorîță, M. Suciu, S. Macavei, I. Kacso, I. Lung, M.-L. Soran, M. Pârvu Molecules. 2020, 25, 819.
[5] A. Ciorîță, S. C. Tripon, I. G. Mircea, D. Podar, L. Barbu-Tudoran, C. Mircea, M. Pârvu Plants. 2021, 10, 622.
[6] A. Ciorîță, C. Zăgrean-Tuza, A. C. Moț, R. Carpa, M. Pârvu Molecules. 2021, 26, 3040.
[7] A. Csapai, V. Pascalau, N. Tosa, S. Tripon, A. Ciorîță, R. M. Mihaila, B. Mociran, C. Costache, C. O. Popa Applied Sciences. 2023, 13, 60.
[8] O. Culicov, A. Stegarescu, M.-L. Soran, I. Lung, O. Opriș, A. Ciorîță, P. Nekhoroshkov Molecules. 2022, 27, 4835.
[9] I.-V. Ganea, A. Nan, A. Ciorîță, R. Turcu, C. Baciu Journal of Molecular Structure. 2022, 1248, 131459.
[10] R. HIRIAN, P. PALADE, A. CIORÎȚĂ, S. MACAVEI, V. POP Studia Universitatis Babes-Bolyai, Physica. 2020, 65.
[11] L. F. Leopold, C. Coman, D. Clapa, I. Oprea, A. Toma, Ș. D. Iancu, L. Barbu-Tudoran, M. Suciu, A. Ciorîță, A. I. Cadiș Colloids and Surfaces B: Biointerfaces. 2022, 216, 112536.

[12] I. Lung, O. Opriş, M.-L. Soran, O. Culicov, A. Ciorîță, A. Stegarescu, I. Zinicovscaia, N. Yushin, K. Vergel, I. Kacso International Journal of Environmental Research and Public Health. 2021, 18, 6739.
[13] G. Marc, A. Stana, A. H. Franchini, D. C. Vodnar, G. Barta, M. Tertiş, I. Şanta, C. Cristea, A. Pîrnău, A. Ciorîţă Antioxidants. 2021, 10, 1707.
[14] F. Nekvapil, I.-V. Ganea, A. Ciorîță, R. Hirian, L. Ogresta, B. Glamuzina, C. Roba, S. Cintă Pinzaru Materials. 2021, 14, 4558.
[15] F. Nekvapil, I.-V. Ganea, A. Ciorîță, R. Hirian, S. Tomšić, I. M. Martonos, S. Cintă Pinzaru Sustainability. 2021, 13, 8777.
[16] O. Opriş, A. Ciorîţă, M.-L. Soran, I. Lung, D. Copolovici, L. Copolovici Ecotoxicology. 2019, 28, 631-642.
[17] O. Opris, I. Lung, M.-L. Soran, A. Ciorita, L. Copolovici PLANT PHYSIOLOGY AND BIOCHEMISTRY. 2020, 151, 342-351.
[18] O. Opriș, I. Lung, M.-L. Soran, A. Ciorîță, L. Copolovici Plant physiology and biochemistry. 2020, 151, 342-351.
[19] O. Opriș, M.-L. Soran, I. Lung, A. Ciorîță, L. Copolovici Journal of Soil Science and Plant Nutrition. 2021, 21, 1408-1420.
[20] L. Racz, M. Tomoaia-Cotisel, C.-P. Racz, P. Bulieris, I. Grosu, S. Porav, A. Ciorîță, X. Filip, F. Martin, G. Serban Stud. Univ. Babes-Bolyai Chem. 2021, 66, 209-224.
[21] C. Sitar, A. Ciorîță Studia Universitatis Babeş-Bolyai, Biologia. 2019, 64, 67-82.
[22] M.-L. Soran, I. Lung, O. Opriș, O. Culicov, A. Ciorîță, A. Stegarescu, I. Zinicovscaia, N. Yushin, K. Vergel, I. Kacso Nanomaterials. 2021, 11, 3413.
[23] A.-E. Stamate, O. D. Pavel, R. Zăvoianu, I. Brezeştean, A. Ciorîță, R. Bîrjega, K. Neubauer, A. Koeckritz, I.-C. Marcu Materials. 2021, 14, 7457.
[24] R.-I. Stefan-van Staden, C. C. Negut, S. S. Gheorghe, A. Ciorîță Analytical and Bioanalytical Chemistry. 2021, 413, 3487-3492.
[25] A. Stegarescu, I. Lung, A. Ciorîță, I. Kacso, O. Opriș, M.-L. Soran, A. Soran Nanomaterials. 2022, 12, 4115.
[26] M. Suciu, C. M. Ionescu, A. Ciorita, S. C. Tripon, D. Nica, H. Al-Salami, L. Barbu-Tudoran Beilstein Journal of Nanotechnology. 2020, 11, 1092-1109.
[27] M. Suciu, C. Mirescu, I. Crăciunescu, S. G. Macavei, C. Leoștean, R. Ştefan, L. E. Olar, S.-C. Tripon, A. Ciorîță, L. Barbu-Tudoran Nanomaterials. 2021, 11, 2184.
[28] V. Surducan, E. Surducan, C. Neamtu, A. C. Mot, A. Ciorîță Bioelectromagnetics. 2020, 41, 200-212.
[29] C. Varodi, F. Pogăcean, A. Cioriță, O. Pană, C. Leoștean, B. Cozar, T. Radu, M. Coroș, R. I. Ștefan-van Staden, S.-M. Pruneanu Chemosensors. 2021, 9, 146.
[30] C. Varodi, F. Pogăcean, M. Coroş, A. Ciorîță, S. Pruneanu Sensors. 2022, 22, 3606.
[31] A. U. Ammar, A. Popa, D. Toloman, S. Macavei, A. Ciorita, A. E. Bocirnea, M. S. Stan, E. Erdem, A. M. Rostas ACS Applied Engineering Materials, 2024, 2 (1), 126-135.
[32] A. Dumitrescu, C. Maxim, M. Badea, A. M. Rostas, A. Ciorîță, A. Tirsoaga, R. Olar International Journal of Molecular Sciences, 2023, 24 (24), 17137.

[33] A. U. Ammar, M. Stan, A. Popa, D. Toloman, S. Macavei, C. Leostean, A. Ciorita, E. Erdem, A. M. Rostas Journal of Energy Storage, 2023, 72, 108599.
[34] A. Hroub, M. H. Aleinawi, M. Stefan, M. Mihet, A. Ciorita, F. Bakan-Misirlioglu, E. Erdem, A. M. Rostas Journal of Alloys and Compounds, 2023, 958, 170442.
[35] L. Chantelle, B. J. Kennedy, C. P. de Oliveira, F. Gouttefangeas, M. Siu-Li, R. Landers, A. Ciorita, A. M. Rostas, I. M. Garcia dos Santos, A. L. Menezes de Oliveira Journal of Alloys and Compounds, 2023, 956, 170353.
[36] S. E. Erhan, A. E. Pârvu, A. Ciorîță, A. A. Putri, A. J. V. Molina, M. Pârvu Notulae Botanicae Horti Agrobotanici Cluj-Napoca, 2023, 51 (3), 13306-13306.
[37] G. Marc, A. Stana, M. Tertiș, C. Cristea, A. Ciorîţă, Ș. M. Drăgan, V. A. Toma, R. Borlan, M. Focșan, A. Pîrnău, L. Vlase, S. Oniga, O. Oniga International Journal of Molecular Sciences, 2023, 24 (17), 13277.
[38] J. Both, A. P. Fülöp, G. S. Szabó, G. Katona, A. Ciorîță, L. M. Mureșan Gels, 2023 9 (8), 668.
[39] F. Nekvapil, M. Mihet, G. Lazar, S. C. Pinzaru, A. Gavrilović, A. Ciorîță, E. Levei, T. Tamaș, M.-L. Soran Water, 2023, 15 (14), 2591
[40] C. L. Văcar, A. Ciorîță, C. Tudoran, D. Podar, R. Carpa, C. Leoștean, I. Kacso, C. Mircea Journal of Cultural Heritage, 2023, 62, 198-205
[41] F Nekvapil, M Mihet, G Lazar, SC Pinzaru, A Gavrilović, A Ciorîță, ...Water, 2023, 15 (14), 2591
[42] J Both, AP Fülöp, GS Szabó, G Katona, A Ciorîță, LM Mureșan, Gels, 2023, 9 (8), 668
[43] G Marc, A Stana, M Tertiș, C Cristea, A Ciorîţă, ȘM Drăgan, VA Toma, ...International Journal of Molecular Sciences, 2023, 24 (17), 13277
[44] SE Erhan, AE Pârvu, A Ciorîță, AA Putri, AJV MOLINA, M Pârvu, Notulae Botanicae Horti Agrobotanici Cluj-Napoca, 2023, 51 (3), 13306-13306
[45] L Chantelle, BJ Kennedy, CP de Oliveira, F Gouttefangeas, M Siu-Li, R Landers, A Ciorita; … Journal of Alloys and Compounds 2023, 956, 170353
[46] A Hroub, MH Aleinawi, M Stefan, M Mihet, A Ciorita, F Bakan-Misirlioglu, ... Journal of Alloys and Compounds, 2023, 958, 170442
[47] AU Ammar, M Stan, A Popa, D Toloman, S Macavei, C Leostean, A Ciorita, ... Journal of Energy Storage 2023, 72, 108599
[48] A Dumitrescu, C Maxim, M Badea, AM Rostas, A Ciorîță, A Tirsoaga, ... International Journal of Molecular Sciences, 2023, 24 (24), 17137
[49] AU Ammar, A Popa, D Toloman, S Macavei, A Ciorita, AE Bocirnea, ... ACS Applied Engineering Materials, 2024, 2 (1), 126-135
[50] A Ciorîță, SE Erhan, ML Soran, I Lung, AC Mot, SG Macavei, M Pârvu Biomedicines, 2024, 12 (6), 1339
[51] A Ciorîţă, M Suciu, AM Rostas, A Tarţa, G Popovici, ... ACS Sustainable Chemistry & Engineering 2024, 12 (29), 10831-10840
[52] SI Polianciuc, A Ciorîță, ML Soran, I Lung, B Kiss, MG Ștefan, ... Antibiotics, 2024, 13 (8), 780
[53] A Urda, T Radu, KR Gustavsen, D Cosma, M Mihet, MC Rosu, A Ciorîța, ... Journal of Physics D: Applied Physics, 2024, 58 (1), 015103

[54] A Colniță, D Marconi, VA Toma, IA Brezeștean, M Suciu, A Ciorîță, ... Microchemical Journal, 2024, 206, 111589

D. Lucrări publicate în ultimii 10 anii în reviste şi volume de conferinţe cu referenţi (neindexate)

- Reviste

- Selecţie cu maximum 20 lucrări în volume de conferinţe

-

E. Brevete obţinute în întreaga activitate

E1. Brevet de invenție Nr. 133721, Dispozitiv fotografic pentru observarea în timp real a evoluției materialului biologic macroscopic in vitro. Inventatori: Ciorîță Alexandra, Surducan Vasile, Surducan Emanoil

Data: **Semnătura:**

04.07.2025

A N E X A 4 . 1

Nume Prenume: **Cîmpean Mirela Dorina**
Gradul didactic: Șef lucrări
Instituția unde este titular: Universitatea Babeș-Bolyai
Facultatea: Facultatea Biologie și Geologie
Departamentul: Taxonomie și Ecologie

L I S T A
lucrărilor ştiinţifice în domeniul disciplinelor din postul didactic

A. **Teza de doctorat**

Cîmpean Mirela Dorina, Titlul tezei: Studiul taxonomic şi ecologic asupra comunităţilor de acarieni acvatici (Acari, Hydrachnidia) din bazinul de drenaj al râului Someşul Mic şi rolul acestor organisme ca indicatori ai calităţii apei; 2010, Universitatea Babeş-Bolyai, Cluj-Napoca, România, coordonator științific: CS I dr. Dan Munteanu, Domeniul Biologie

B. **Cărţi si capitole în cărţi publicate în ultimii 10 ani**

1. Cîmpean, M., Battes, K.P., Momeu, L., Hidrobiologie - ape continentale, ghid de lucrări practice, Presa Universitară Clujeană, 2018, e-book, Cluj-Napoca, ISBN: 978-973-595-276-1, 1-110
2. Cîmpean, M., 2018, Studiul taxonomic şi ecologic asupra comunităţilor de acarieni acvatici (Acari, Hydrachnidia) din bazinul de drenaj al râului Someşul Mic şi rolul acestor organisme ca indicatori ai calităţii apei, Ed. Presa Universitră Clujeană, ISBN 978-606-37-0324-9, 1-190., e-book
3. Momeu, L., Cîmpean, M., Battes, K.P., Hidrobiologie, Presa Universitară Clujeană, 2018, e-book, Cluj-Napoca, 1-131, ISBN:978-973-595-275-4

C. **Lucrări indexate ISI/BDI publicate în ultimii 10 ani**

Lucrări indexate ISI

1. Cîmpean, M., Șuteu, A.-M., Berindean, A., & Battes, K. P. (2022). Diversity of Spring Invertebrates and Their Habitats: A Story of Preferences. Diversity, 14(5), 367. https://doi.org/10.3390/d14050367
2. Link, M., Schreiner, V. C., Graf, N., Szöcs, E., Bundschuh, M., Battes, K. P., Cîmpean M., Sures B., Grabner D., Buse J. & Schäfer, R. B., 2022, Pesticide Effects on Macroinvertebrates and Leaf Litter Decomposition in Areas with Traditional Agriculture. Science of the Total Environment 828, 154549, http://dx.doi.org/10.1016/j.scitotenv.2022.154549
3. Şuteu, A. M., Momeu, L., Battes, K. P., Baricz, A., Cristea, A., Bulzu, P. A., Buda, D. M., Banciu, H. L., Cîmpean, M., 2021, Diversity and distribution of phototrophic primary producers in saline

lakes from Transylvania, Romania. Plant Syst Evol 307: 12. https://doi.org/10.1007/s00606-020-01733-0

4. Schreiner, V. C., Link, M., Kunz, S., Szöcs, E., Scharmüller, A., Vogler, B., Beck, B., Battes, K.P., Cîmpean, M., Singer, H.P., Hollender, J., Schäfer, R.B., 2021, Paradise lost? Pesticide pollution in a European region with considerable amount of traditional agriculture. Water Research, 188, 116528. https://doi.org/10.1016/j.watres.2020.116528
5. Battes KP, Váncsa É, Barbu-Tudoran L, Cîmpean M, 2020, A species on the rise in Europe: Sinodiaptomus sarsi (Rylov, 1923) (Copepoda, Calanoida), a new record for the Romanian crustacean fauna. BioInvasions Records, 9(2): 320–332, https://doi.org/10.3391/bir.2020.9.2.17
6. Baricz, A., Chiriac, C. M., Andrei, A.-Ș., Bulzu, P. A., Levei, E. A., Cadar, O., Battes, K. P., Cîmpean, M., Șenilă, M., Cristea, A., Muntean, V., Alexe, M., Coman, C., Szekeres, E. K., Sicora, C. I., Ionescu, A., Blain, D., O'Neill, W. K., Edwards, J., Hallsworth, J. E., Banciu, H. L., 2020, Spatio-temporal insights into microbiology of the freshwater-to-hypersaline, oxic-hypoxic-euxinic waters of Ursu Lake, Environmental Microbiology, doi: 10.1111/1462-2920.14909
7. Graf, N., Battes, K. P., Cîmpean, M., Entling, M. H., Frisch, K., Link, M., Scharmüller, A., Schreiner, V. C., Szöcs, E., Zubrod, J. P., Schäfer, R. B., 2020, Relationship between agricultural pesticides and the diet of riparian spiders in the field, Environmental Sciences Europe, 32:1, https://doi.org/10.1186/s12302-019-0282-1
8. Şandric, I., Satmari, A., Zaharia, C., Petrovici, M., Cîmpean, M., Battes, K.P., David, D.-C., Pacioglu, O., Weiperth, A., Gál, B., Pîrvu, M., Muntean, H., Neagul, M., Spătaru, A., Toma, C. G., Pârvulescu, L., 2019, Integrating catchment land cover data to remotely assess freshwater quality: a step forward in heterogeneity analysis of river networks, Aquatic Sciences, 2019 81(2):26, https://doi.org/10.1007/s00027-019-0624-5
9. Graf, N., Battes, K. P., Cîmpean, M., Dittrich, P., Entling, M. H., Link, M., Scharmüller, A., Schreiner, V. C., Szöcs, E., Schäfer, R. B., 2019, Do agricultural pesticides in streams influence riparian spiders? Science of the Total Environment STOTEN, 660, 2019 126–135, https://doi.org/10.1016/j.scitotenv.2018.12.370
10. Battes K.P., Cîmpean M., Momeu L., Șuteu A.M., Pauliuc G., Stermin A.N., David A., 2019, Species-area relationships for aquatic biota in several shallow lakes from the Fizeș Valley (Transylvania, Romania), North-Western Journal of Zoology 15(2): 117-126, article no: e181301
11. Alexe, M., Șerban, G., Baricz, A., Andrei, A. Ș., Cristea, A., Battes, K. P., Cîmpean, M., Momeu, L., Muntean, V., Porav, S. A, Banciu, H. L., 2018, Limnology and plankton diversity of salt lakes from Transylvanian Basin (Romania): A review, J. Limnol., 77(1): 17-34, doi: 10.4081/jlimnol.2017.1657
12. Pešić, V., Asadi, M., Cîmpean, M., Dabert, M., Esen, Y., Gerecke, R., Martin, P., Savić, A., Smit, H., Stur, E., 2017, Six species in one: evidence of cryptic speciation in Hygrobates fluviatilis complex (Acari, Hydrachnidia, Hygrobatidae) Syst. Appl. Acarol., 22 (9), 1327-1777.

Lucrări indexate BDI

13. Keresztes, L., Cîmpean, M., Battes, K., Dénes A., Terec A.B., 2022, Dicranomyia (Idiopyga) nigristigma Nielsen, 1919 (Diptera, Limoniidae) recorded for the first time from calcareous springs in Romania, Entomologica romanica 25: 31-34, doi: 10.24193/entomolrom.25.4
14. Berindean, A., Battes, K.P., Kelemen, B., Cîmpean, M., 2020, An overview on genus *Artemia* Leach, 1819 (Crustacea: Branchiopoda, Anostraca) from Romania, SCSB, Scientific Studies and Research. Biology, Vasile Alecsandri University from Bacău, 29(2), 96-101
15. Pacioglu, O., Satmari A., Petrovici M., Pîrvu M., Cîmpean M., Battes K. P., Lele S. F., Curtean-Bănăduc A., Pârvulescu L., 2019, Flash-floods influence macroinvertebrate communities

distribution in lotic ecosystems, Transylvanian Review of Systematical and Ecological Research 21(1), 45-56, DOI: 10.2478/trser-2019-0004
16. Cîmpean, M., Battes K.P., 2018, Present status of water mite species (Acari, Hydrachnidia) described by Motaş, Tanasachi and Orghidan from Romania, Acta Biologica, 25:59-68
17. Battes, K.P., Cîmpean, M., Momeu, L., Avram, A., Battes, K.W., Stoica, I.V., 2018, Multiple impact assessment and water quality based on diatom, benthic invertebrate and fish communities in the Arieș River catchment area (Transylvania, Romania), Studia UBB Biologia, 63, 2, 27-40, doi:10.24193/subbbiol.2018.2.02
18. Micle, M., Șuteu, A.-M., Momeu, L., Coman, P., Battes, K.P., Cîmpean, M., 2018, Seasonal dynamics of biota from several springs located in the Apuseni Mountains, Romania, Studii și Cercetări Științifice, Universitatea Bacău, Seria Biologie (Scientific Studies and Research, Biology, Bacău), 27/2, 34-41
19. Stermin, A. N., David, A., Drăgoi, C., Cîmpean, M., Battes, K. P., 2017, Neighbours vs. strangers discrimination in Water Rail (Rallus aquaticus), Studia UBB Biologia, 62(2), 75-83, doi:10.24193/subbbiol.2017.2.07
20. Ciorca, A.-M., Momeu, L., Battes, K.P., 2017, Same karstic substratum, different aquatic communities? Case study: three water bodies from western Romania, Studia UBB Biologia, 62(1), 67-85, doi:10.24193/subbb.2017.1.05
21. Crișan, C. D., Battes, K. P., Cîmpean, M., 2016, First record of *Bryocamptus (Bryocamptus) mrazeki* (Minkiewicz, 1916) in the Romanian harpacticoid fauna (Copepoda, Harpacticoida), Studia UBB Biologia, 61(2), 205-212
22. Coman, P., Bozeșan, A., Battes, K.P., David, A., Stermin, A. N., Cîmpean, M., 2016, Ecological dynamics between Lake Sucutardul Mare and its temporary fry pond (the Fizeș Valley, Transylvania, Romania): the case of aquatic invertebrates, Studia UBB Biologia, 61(2), 153-166
23. Anghiuș, C.G., Cîmpean, M., Battes, K.P., 2016, Aquatic invertebrate communities from the Tur River catchment area (Transylvania, Romania), Acta Oecologica Carpatica, IX, 139-150
24. Momeu L., Ciorca, A., László, O. T., Segedi, C., Battes, K.P., Cîmpean M., 2015, The karstic lake Iezerul Ighiel (Transylvania, Romania): its first limnological study, Studia UBB Biologia, 60(2), 39-60
25. Florescu, H.M., Maxim, M.M., Momeu, L., Cîmpean, M., Battes, K.P., 2015, Wetland algal communities from Balta Mică a Brăilei Nature Park (Romania), Transylv. Rev. Syst. Ecol. Res. 17.2, The Wetlands Diversity, 23-44, doi: 10.1515/trser-2015-0061
26. Florescu, H.M., Cîmpean, M., Momeu, L., Leonte, L., Bodea, D., Battes, K.P., 2015, Ecological analyses on benthic diatom and invertebrate communities from the Someșul Mic catchment area (Transylvania, Romania), Studia UBB Biologia, 60(1), 69-87

D. Lucrări publicate în ultimii 10 anii în reviste şi volume de conferinţe cu referenţi (neindexate) - Rezumate

1. Sambor O, Battes KP, Camacho A, Cîmpean M, Marin C, Perșoiu A, Șarcani B, Tudorache A, Iepure S (2022) The response of aquatic fauna to variable environmental conditions in Ghețarul de la Vârtop cave (Apuseni Natural Park, Romania). ARPHA Conference Abstracts 5: e90725. https://doi.org/10.3897/aca.5.e90725
2. Grapă, S., Nistor, G., Sitar, C, Battes, K.P., Cîmpean, M., 2020, Colecția de plecoptere a profesorului Kis Bela de la Muzeul Zoologic al Universității Babeș-Bolyai din Cluj-Napoca,

Sesiunea științifică anuală a studenților naturaliști, Ediția a IV-a, Universitatea Al.I.Cuza Iași, 31 octombrie 2020, volum de rezumate, pag. 16-17;

3. Perșoiu, I., Berindean, A., Battes, K. P., Cîmpean, M., 2019, Environmental Impact Assessment along Somesul Mic River (Transylvanian Depression, Romania) from an historical perspective, 6th biennial Symposium of the International Society for River Science, Riverine landscapes as coupled socio-ecological systems, 8-13.09.2019, Viena, Austria, University of Natural Resources and Life Sciences Vienna, Austria, book of abstracts, pag. 281;
4. Battes, K. P., Cîmpean, M., Momeu, L., Muntean, V., Andrei, A. -Ș., Banciu, H. L., 2017, Patterns of invertebrate diversity in several saline lakes from the Transylvanian Basin, Studia UBB Biologia, 62 (LXII), Sp.Iss., 87-88;
5. Baricz A., Battes K.P., Cîmpean M., Andrei A.-Ș., Chiriac C., Levei E.A., Momeu L., Cristea A., Pop D.A., Alexe M., Muntean V., Banciu H.L., 2016, Un an de studiu integrat al vieții microscopice din lacul Ursu (Sovata, România), Conferința ”85 de ani de cercetare în domeniul microbiologiei : a 56-a Sesiune anuală de comunicări ştiinţifice, Academia Română, Institutul de Biologie Bucureşti, Departamentul de Microbiologie”, volumul ”Institutul de Biologie. Sesiune anuală de comunicări ştiinţifice”, Ed. Ars Docendi, Bucureşti, 41-45, ISBN 978-973-558-953-0

Data: **Semnătura:**

01.07.2025

A N E X A 4 . 1

Nume Prenume: **Covaci Eniko**

Gradul didactic: Lector

Instituția unde este titular: Universitatea Babeș-Bolyai

Facultatea: Chimie și Inginerie Chimică

Departamentul: Chimie

L I S T A
lucrărilor ştiinţifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

Domeniul: chimie

Titlul tezei *Metode eco-analitice de determinare și speciere a mercurului prin spectrometria de emisie optică în microplasme,* anul susținerii 2022, Universitatea Babes-Bolyai, Cluj-Napoca

Conducător de doctorat: Prof. Univ. Dr. Frențiu Tiberiu. Facultatea de Chimie și Inginerie Chimică, Universitatea Babes-Bolyai, Cluj-Napoca, Romania.

B. Cărţi si capitole în cărţi publicate în ultimii 10 ani

B1. Metode instrumentale de analiză: aplicații.
Tiberiu Frențiu, Augustin-Cătălin Moț, Enikő Covaci. Presa Universitară Clujeană, Cluj-Napoca, 2019, ISBN: 978-606-37-0515-1

C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani

C1. High-resolution continuum source quartz tube atomic absorption spectrometry for the determination of As, Sb, Bi, Hg, Se and Te in food and environmental matrices after chemical vapor generation
B. D. Szeredai, T. Frentiu, N. Muntean, A.I. Dudu, **E. Covaci**, *Journal of Analytical Atomic Spectrometry*, **2025**, 40, 942-953

C2. Unravelling the bridge of polyphenol composition and mineralomics in Se biofortified edible Allium species
A. Gandea, C. Zagrean-Tuza, **E. Covaci**, T. Frentiu, O. Marincas, E. Gal, A.C. Mot, *Journal of Food Composition and Analysis*, **2024**, 135, 106648

C3. Validation of high-resolution continuum source flame atomic absorption spectrometry for determination of selected toxic and potential toxic metals in the decontamination process of wastewater discharged in natural receivers
B.S. Senna, W. Masamba, V. Obuseng, T. Frentiu, B.S. Angyus, **E. Covaci**, *Acta Chimica Slovenica*, **2024**, 71, 500-508

C4. High-resolution continuum source quartz tube/flame atomic absorption spectrometry method with broad applicability for the comprehensive assessment of selected toxic elements content in recyclable (bio)plastic materials
B.D. Szeredai, T. Frentiu, M. Ponta, N. Muntean, **E. Covaci**, *Spectrochimica Acta Part B: Atomic Spectroscopy*, **2024**, 218, 106995

C5. Simultaneous determination of Cd, Pb, Cu and Zn as total and labile fractions in soil using a small-sized electrothermal vaporization capacitively coupled plasma microtorch optical emission spectrometer after diffusive gradients in thin-film passive accumulation
S. B. Angyus, M. Senila, **E. Covaci**, M. Ponta, M. Frentiu T. Frentiu, *Journal of Analytical Atomic Spectrometry*, **2024**, 39, 141-152

C6. *In-situ* Diffusive Gradients in thin-films passive sampling coupled with ex-situ small-sized electrothermal vaporization capacitively coupled plasma microtorch optical emission spectrometry as green and white method for the simultaneous determination of labile species of toxic elements in surface water
S. B. Angyus, M. Senila, T. Frentiu, M. Ponta, M. Frentiu, **E. Covaci**, *Talanta*, **2023**, 259, număr articol 124551

C7. Unified analysis method for total and inorganic As determination in foodstuffs by hydride generation high-resolution continuum source quartz tube atomic absorption spectrometry
L. Chirita, **E. Covaci**, M. Ponta, T. Frentiu, *Analytical Methods*, **2023**, 15, 1734-1746.

C8. Mercury determination in various environmental, food and material complex matrices using unified operating conditions for a cold vapor generation high-resolution continuum source quartz tube atomic absorption spectrometry method
L. Chirita, **E. Covaci**, M. Ponta, T. Frentiu, *Analytical Methods*, **2023**, 15, 6294-6301.

C9. Total and Inorganic Arsenic Determination in Soil, Sediments, and Sludge by Hydride Generation High-Resolution Continuum Source Quartz Tube Atomic Absorption Spectrometry in Dilute Hydrochloric Acid Using Borohydride and L-Cysteine
L. Chirita, T. Frentiu, M. Ponta, **E. Covaci**, *Analytical Letters*, **2023**, 57, 1526-1543

C10. The influence of the distillation process on the content of metals in home- and industrially brewed alcoholic beverages risk assessment to human health
N. Muntean, T. Frentiu, G. Rakos, **E. Covaci**, *Studia Universitatis Babes-Bolyai Chemia*, **2022**, 67, 215-234

C11. Effect of *in vitro* simulated gastrointestinal digestion on some nutritional characteristics of several dried fruits.
T. Scrob, **E. Covaci**, A. Hosu, C. Tănăselia, D. Casoni, A.I. Torok, T. Frențiu, C. Cimpoiu. *Food Chemistry,* **2022**, 385, număr articol 132713

C12. Greenness and whiteness profiles of UV/Vis photochemical vapor generation capacitively coupled plasma microtorch optical emission spectrometry method for mercury determination and speciation in food and water.
E. Covaci, T. Frențiu. *Studia UBB Chemia*, **2022**, 67, 7–25

C13. Heavy metal-resistant filamentous fungi as potential mercury bioremediators. C. Văcar. **E. Covaci**, S. Chakraborty, B. Li, D.C. Weindorf, T. Frentiu, M. Pârvu, D. Podar. *Journal of Fungi*, **2021**, 7, număr articol 386.

C14. Simultaneous determination of As, Bi, Sb, Se, Te, Hg, Pb and Sn by small-sized electrothermal vaporization capacitively coupled plasma microtorch optical emission spectrometry using direct liquid microsampling.
S.B. Angyus, E.A. Levei, D. Petreuș, R. Etz, **E. Covaci**, O.T. Moldovan, M. Ponta, E. Darvasi, T. Frențiu. *Molecules,* **2021**, 26, număr articol 2642

C15. Application of inductively coupled plasma spectrometric techniques and multivariate statistical analysis in the hydrogeochemical profiling of caves – Case study Cloșani, Romania. A.I. Torok, E.A. Levei, S. Constantin, O.T. Moldovan, M. Șenilă, O. Cadar, D. Casoni, S.B. Angyus, C. Tănăselia, **E. Covaci**, T. Frențiu. *Molecules*, **2021**, 26, număr articol 6788

C16. Determination of selenium in food and environmental samples by hydride generation high-resolution continuum source quartz furnace atomic absorption spectrometry L. Chirița, **E. Covaci**, A.C. Moț, M. Ponta, A. Gândea, T. Frențiu, *Journal of Analytical Atomic Spectrometry*, **2021**, 36, 267–272

C17. Analytical performances and validation of optical emission and atomic absorption spectrometry methods for multielemental determination in vegetables and fruits
E. Covaci, M. Șenilă, M. Ponta, T. Frențiu. *Revue Romuaine de Chimie*, **2020**, 65, 735-745

C18. Characterization of *Lycium barbarum L.* berry cultivated in North Macedonia – a chemometric approach
E. Covaci, M. Șenilă, L.F. Leopold, N.K. Olah, C. Cobzac, V.I. Petropulos, B. Balabanova, O. Cadar, A. Becze, M. Ponta, A.C. Moț, T. Frențiu. *Journal of Berry Research*, **2020**, 10, 223-241

C19. Highly sensitive eco-scale method for mercury determination in water and food using photochemical vapor generation and miniaturized instrumentation for capacitively coupled plasma microtorch optical emission spectrometry
E. Covaci, M. Șenilă, C. Tănăselia, S.B. Angyus, M. Ponta, E. Darvasi, M. Frențiu, T. Frențiu, *Journal of Analytical Atomic Spectrometry,* **2018**, 33, 799-808

C20. Eco-scale non-chromatographic method for mercury speciation in fish using formic acid extraction and UV/Vis photochemical vapor generation capacitively coupled plasma microtorch optical emission spectrometry
E. Covaci, S.B. Angyus, M. Șenilă, M. Ponta, E. Darvasi, M. Frențiu, T. Frențiu, *Microchemical Journal,* **2018**, 141, 155-162

C21. Mercury speciation in fish tissue by eco-scale thermal decomposition atomic absorption spectrometry: method validation and risk exposure to methylmercury
M. Șenilă, **E. Covaci**, O. Cadar, M. Ponta, M. Frențiu, T. Frențiu, *Chemical Papers,* **2018**, 72, 441-448

C22. Mercury speciation using non-chromatographic chemical vapor generation capacitively coupled plasma microtorch optical emission spectrometry method – Evaluation of methylmercury exposure
Covaci, M. Șenilă, M. Ponta, E. Darvasi, M. Frențiu, T. Frențiu, *Food Control*, **2017**, 82, 266-273

C23. Simultaneous determination of Zn, Cd, Pb and Cu in mushrooms by differential pulse anodic stripping voltammetry
Covaci, E. Darvasi, M. Ponta, *Studia UBB Chemia*, **2017**, LXII, 3, 133-144

C24. Methylmercury determination in seafood by photochemical vapor generation capacitively coupled plasma microtorch optical emission spectrometry
Covaci, M. Șenilă, M. Ponta, E. Darvasi, D. Petreuș, M. Frențiu, T. Frențiu, *Talanta,* **2017**, 170, 464-472

D. Lucrări publicate în ultimii 10 anii în reviste şi volume de conferinţe cu referenţi (neindexate)

- Reviste

- Selecţie cu maximum 20 lucrări în volume de conferinţe

1. Development and evaluation of a general method for total and inorganic As determination in environmental samples by hydride generation high-resolution continuum source quartz tube atomic absorption spectrometry.
L. Chirița, **E. Covaci**, T. Frențiu. Proceedings 48th International Conference of the Slovak Society of Chemical Engineering - SSCHE 2022 and Membrane Conference PERMEA 2022, Tatranske Matliare, Slovacia, 23-26 mai **2022**

2. Validation of flame atomic absorption spectrometry for the determination of metals in the extract resulted in the leaching of Waste Printed Circuit Board

E. Covaci. S.A. Dorneanu, N. Cotolan, T. Frențiu. Proceedings 46th International Conference of the Slovak Society of Chemical Engineering - SSCHE, Tatranske Matliare, Slovacia, 20-23 mai **2019**

3. Determination of metallic impurities in the copper deposit obtained by electroextraction from solution resulted in the recycling of Waste Printed Circuit Board
E. Covaci. S.A. Dorneanu, N. Cotolan, T. Frențiu. Proceedings 46th International Conference of the Slovak Society of Chemical Engineering - SSCHE, Tatranske Matliare, Slovacia, 20-23 mai **2019**

4. A non-chromatographic method for the determination of methylmercury in fish fillet using optical emission spectrometry in a capacitively coupled plasma microtorch after UV photo-induced derivatization
E. Covaci, M. Șenilă, E. Darvasi, M. Ponta, M. Frențiu, C. Tănăselia, T. Frențiu, Proceedings 44th International Conference of the Slovak Society of Chemical Engineering - SSCHE, Demanovska Dolina, Slovacia, 22-26 mai **2017**, Pe-We-4, 007.pdf, pp. 529-536

5. Mercury speciation in fish tissue by thermal decomposition atomic absorption spectrometry: method validation and risk assessment to methylmercury exposure
M. Șenilă, **E. Covaci**, O. Cadar, M. Ponta, M. Frențiu, T. Frențiu, Proceedings 44th International Conference of the Slovak Society of Chemical Engineering - SSCHE, Demanovska Dolina, Slovacia, 22-26 mai **2017**, Pe-We-4, 006.pdf, pp. 520-528

E. Brevete obţinute în întreaga activitate

Data:

01.07.2025

Semnătura:

Covaci

A N E X A 4.1

Nume Prenume: **Crișan Florin**

Gradul didactic: Șef lucrări dr.

Instituția unde este titular: UNIVERSITATEA BABEŞ-BOLYAI.

Facultatea: BIOLOGIE ȘI GEOLOGIE
Departamentul: TAXONOMIE ȘI ECOLOGIE

L I S T A
lucrărilor ştiinţifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

Florin **CRIŞAN**, *Studii corologice, ecologice şi cenologice asupra macrolichenilor foliacei si fruticulosi din Muntii Padurea Craiului, Jud Bihor*, 2001, Universitatea "Babeş - Bolyai" din Cluj- Napoca

B. Cărţi si capitole în cărţi publicate în ultimii 10 ani

C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani

1. Nguyen TT, Yoon S, Yang Y, Lee H-B, Oh S, Jeong M-H, Kim J-J, Yee S-T, **CRIȘAN, F.,** Moon C, Lee K Y, Kim K K, Hur J S, Kim H, 2015, *Lichen Secondary Metabolites in Flavocetraria cucullata Exhibit Anti-Cancer Effects on Human Cancer Cells through the Induction of Apoptosis and Suppression of Tumorigenic Potentials*, PLOS ONE, 9, (10), e111575, p. 1-14.
2. Yang Y, Than T, Nguyen T-T, Jeong M-H, **CRIȘAN, F.,** Yu Y-H, Ha H-H, Choi K-H, Jeong H-G, Jeong T-C, Lee K-Y, Kim K-K, Hur J-S, Kim H., 2016, *Inhibitory Activity of (+)-Usnic Acid against Non-Small Cell Lung Cancer Cell Motility*, , PLOS ONE, 11, (1), e146575, p. 1-16.
3. Ardelean, I.V., **CRIȘAN, F.,** Gafta, D., Roman, A.M., 2019, *High lichen species richness but low taxonomic diversity built up on abandoned tailings heaps in a cultural landscape*, Flora, 251, p. 68- 76.
4. SUTEU, M.A., GAFTA, D.C. **CRIȘAN, F., 2021,** *Constraints to shoot growth and biomass allocation in Astragalus peterfii growing in two different stressful habitats,* PHYTON-ANNALES REI BOTANICAE, 61, 25 - 30, ISSN: 0079-2047.
5. CIANFAGLIONE, K.; **CRIȘAN, F.;** GAFTA, D. *Soil Quality Enhances Seed Germination Success in Ephedra major—A Pilot Experiment.* Plants 2023, 12, 438. https://doi.org/ 10.3390/plants12030438
6. **CRIȘAN, F.,** Gafta, D., Goia, I., 2025, *Changes in the Composition and Richness of Epiphytic Macrolichens Within Cluj-Napoca City (Romania) Between 2000 and 2024*, J. Zool. Bot. Gard. 2025, 6, 14, https://doi.org/10.3390/jzbg6010014

D. Lucrări publicate în ultimii 10 anii în reviste şi volume de conferinţe cu referenţi (neindexate)

- Reviste

1. Lőkös, L., **CRIȘAN, F.,** Hur, J-S., Varga, N., Farkas, E., 2018, *Enumeration of the Llichen-forming and lichenicolous fungi of the Călimani Mountains (Eastern Carpathians, Romania)*, Studia bot. hung. 49(1), 5–40.
2. **CRIȘAN, F.,** 2020, *The lichen genus Lepraria Ach. (Stereocaulaceae, lichenized Ascomycota) in Romania*, One Health & Risk Management, 2(1), p. 42-51. doi: 10.38045/ohrm.2021.1.07.
3. **CRIȘAN, F.**, 2023, *The significance of epiphytic lichens as bioindicators of air pollution for human health, Series B.*, 25 (3), 167 - 174, Proc. Rom. Acad. , București.

- Selecţie cu maximum 20 lucrări în volume de conferinţe

-

E. Brevete obţinute în întreaga activitate

-

Data: 26.06.2025 **Semnătura:** 

A N E X A 4 . 1

Nume Prenume: Cruceriu Daniel
Gradul didactic: Șef lucrări
Instituția unde este titular: Universitatea Babeș-Bolyai
Facultatea: Biologie și Geologie
Departamentul: Biologie Moleculară și Biotehnologie

L I S T A
lucrărilor ştiinţifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

"Extracte vegetale farmaceutice în managementul cancerului de sân. *Calendula officinalis*, *Solanum chacoense* şi *S. bulbocastanum*: profil biochimic, activitate anti-tumorală selectivă şi efecte moleculare asociate" – Universitatea Babeș-Bolyai, România, 2020 (https://rei.gov.ro/?&sm=&ddpN=1837415839&we=7de50869e17bec77664920c1aeae1a47&wf=dGFCall&wtok=&wtkps=S7QytqouBhJKxZkpStbFVqZGVkrmhiYFOVlJ5ZklmaWZSUYVpmbZ6YnFhWmVRgYFmbmGyWa5VUbluplG5QUFZrqG+RmJppU5IL1ArdmFYAbQPCU3XWdHXWMDQ0NjfQMjPQNzPSMDIwMlqLryVCVrP+taAA==&wchk=4d8b083d09f671e3be71e40a1cd14f8e42eef744)

B. Cărţi si capitole în cărţi publicate în ultimii 10 ani

-

C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani

- **Articole ISI**

1. Oravetz K, Diaconeasa Z, Carpa R, Rakosy-Tican E, **Cruceriu D**, **2024**. The Antioxidant, Antimicrobial, and Antitumor Proprieties of Flavonol-Rich Extracts from *Allium ursinum* (Wild Garlic) Leaves: A Comparison of Conventional Maceration and Ultrasound-Assisted Extraction Techniques. International Journal of Molecular Sciences. 25(23):12799. (**ISI IF$_{2023}$ = 4.9, AIS$_{2023}$ = 1.053, Q1).**
2. Oravetz K, Todea AV, Balacescu O, **Cruceriu D***, Rakosy-Tican E, **2023**. Potential antitumor activity of garlic against colorectal cancer: focus on the molecular mechanisms of action. European Journal of Nutrition. 62:2347-2363. *- corresponding author**.** (**ISI IF$_{2023}$ = 4.1, AIS$_{2023}$ = 1.027, Q2).**
3. Paraschiv M, Csiki M, Diaconeasa Z, Socaci S, Balacescu O, Rakosy-Tican E, **Cruceriu D**, **2022**. Phytochemical Profile and Selective Cytotoxic Activity of a *Solanum bulbocastanum* Dun. Methanolic Extract on Breast Cancer Cells. Plants. 11(23):3262 (**ISI IF$_{2022}$ = 4.50, AIS$_{2022}$ = 0.621, Q1).**
4. Gavrilas LI^{+}, **Cruceriu D**$^{+}$, Mocan A, Loghin F, Miere D, Balacescu O, **2022**. Plant-Derived Bioactive Compounds in Colorectal Cancer: Insights from Combined Regimens with Conventional

Chemotherapy to Overcome Drug-Resistance. Biomedicines. 10(8):1948 [+] - prim co-autori. (**ISI IF$_{2021}$ = 4.70, AIS$_{2021}$ = 0.798, Q1)**

5. Drețcanu G, Știrbu I, Leoplold N, **Cruceriu D**, Danciu C, Stănilă A, Fărcaș A, Borda IM, Iuhas C, Diaconeasa Z, **2022**. Chemical Structure, Sources and Role of Bioactive Flavonoids in Cancer Prevention: A Review. Plants. 11(9):1117. (**ISI IF$_{2022}$ = 4.50, AIS$_{2022}$ = 0.802, Q1)**
6. **Cruceriu D**, Diaconeasa Z, Socaci S, Socaciu C, Balacescu O, Rakosy-Tican E, **2021**. Extracts of the wild potato species *Solanum chacoense* on breast cancer cells: biochemical characterization, *in vitro* selective cytotoxicity and molecular effects. *Nutrition and Cancer*, 73(4):630-641 (**ISI IF$_{2021}$ = 2.810, AIS$_{2021}$ = 0.490, Q3**)
7. **Cruceriu D**, Diaconeasa Z, Socaci S, Socaciu C, Rakosy-Tican E, Balacescu O, **2020**. Biochemical profile, selective cytotoxicity and molecular effects of *Calendula officinalis* extracts on breast cancer cell lines. *Notulae Botanicae Horti Agrobotanici* **48**(1):24-39 (**ISI IF$_{2020}$ = 1.444, AIS$_{2020}$ = 0.202, Q3**)
8. **Cruceriu D**, Erdelyi-Molnár I, Diaconeasa Z, Margineanu AM, Auror A, Rakosy-Tican E, **2020**. Comparative characterization of polyphenols and antioxidant activity under wound stress and of trichomes in the somatic hybrids *Solanum bulbocastanum* + *S. tuberosum* cv. 'Rasant'. *Studia UBB Chemia* 65(2):133-148 (**ISI IF$_{2020}$ = 0.447, AIS$_{2020}$ = 0.051, Q4**)
9. **Cruceriu D**, Balacescu O, Rakosy-Tican E, **2018**. *Calendula officinalis*: potential roles in cancer treatment and palliative care. *Integrative Cancer Therapy* 17(4):1068-1078 (**ISI IF$_{2018}$ = 2.634, AIS$_{2018}$ = 0.630, Q1**)
10. **Cruceriu D**, Erdelyi-Molnár I, Sconta Z, Aurori A, Socaciu C, Rakosy-Tican E, **2017**. *In Vitro* Culture as a Stressful Factor Triggers Different Physiological Responses in Somatic Hybrids between *Solanum tuberosum* and *S. bulbocastanum. Notulae Botanicae Horti Agrobotanici*, 45(1):75-81 (**ISI IF$_{2017}$ = 0.648, AIS$_{2017}$ = 0.178, Q4)**

- **Articole BDI**

11. Rakosy-Tican E, Thieme R, Aurori A, Erdelyi-Molnár I, Besenyei E, Mustață RA, Mărgineanu AM, **Cruceriu D, 2016**. The Application of Combinatorial Biotechnology in Improving Potato Resistance to Biotic and Abiotic Stress. *Studia Biologia* 61(1):79-88 (**BDI**)

D. Lucrări publicate în ultimii 10 anii în reviste şi volume de conferinţe cu referenţi (neindexate)

- Reviste

- Selecţie cu maximum 20 lucrări în volume de conferinţe

Conferințe științifice internaționale

1. **Cruceriu D**, Gavrilas L, Baldasici O, **2023**. Curcumin reverses the irinotecan acquired resistance in colorectal cancer cells, *in vitro* (Prezentare), *The Annual International Conference of the Romanian Society of Biochemistry and Molecular Biology*, Cluj-Napoca

2. **Cruceriu D**, Gavrilas L, Baldasici O, Balacescu L, Balacescu O, **2023**. The potential of curcumin in reversing the acquired resistance to irinotecan in colorectal cancer cells (Prezentare – invited speaker), *Third Edition of the OncoHub International Conference*,, București
3. **Cruceriu D**, Rakosy E, Socaciu C, Balacescu O, **2018**. *Calendula officinalis*: in vitro selective cytotoxic activities against breast cancer (Prezentare), *The Annual International Conference of the Romanian Society of Biochemistry and Molecular Biology*, Bucureşti

12. Conferințe științifice naționale

-

E. Brevete obţinute în întreaga activitate

-

Data:
04.07.2025

Semnătura:
Șef lucrări dr. Cruceriu Daniel

E – Brevete (pentru întreaga activitate)

A N E X A 4 . 1

Nume Prenume: Cruceriu Daniel
Gradul didactic: Șef lucrări
Instituția unde este titular: Universitatea Babeș-Bolyai
Facultatea: Biologie și Geologie
Departamentul: Biologie Moleculară și Biotehnologie

L I S T A
lucrărilor ştiinţifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

"Extracte vegetale farmaceutice în managementul cancerului de sân. *Calendula officinalis*, *Solanum chacoense* şi *S. bulbocastanum*: profil biochimic, activitate anti-tumorală selectivă şi efecte moleculare asociate" – Universitatea Babeș-Bolyai, România, 2020 (https://rei.gov.ro/?&sm=&ddpN=1837415839&we=7de50869e17bec77664920c1aeae1a47&wf=dGFCall&wtok=&wtkps=S7QytqouBhJKxZkpStbFVqZGVkrmhiYFOVlJ5ZklmaWZSUYVpmbZ6YnFhWmVRgYFmbmGyWa5VUbluplG5QUFZrqG+RmJppU5IL1ArdmFYAbQPCU3XWdHXWMDQ0NjfQMjPQNzPSMDIwMlqLryVCVrP+taAA==&wchk=4d8b083d09f671e3be71e40a1cd14f8e42eef744)

B. Cărţi si capitole în cărţi publicate în ultimii 10 ani

-

C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani

- **Articole ISI**

1. Oravetz K, Diaconeasa Z, Carpa R, Rakosy-Tican E, **Cruceriu D**, **2024**. The Antioxidant, Antimicrobial, and Antitumor Proprieties of Flavonol-Rich Extracts from *Allium ursinum* (Wild Garlic) Leaves: A Comparison of Conventional Maceration and Ultrasound-Assisted Extraction Techniques. International Journal of Molecular Sciences. 25(23):12799. (**ISI IF$_{2023}$ = 4.9, AIS$_{2023}$ = 1.053, Q1).**
2. Oravetz K, Todea AV, Balacescu O, **Cruceriu D***, Rakosy-Tican E, **2023**. Potential antitumor activity of garlic against colorectal cancer: focus on the molecular mechanisms of action. European Journal of Nutrition. 62:2347-2363. *- corresponding author**.** (**ISI IF$_{2023}$ = 4.1, AIS$_{2023}$ = 1.027, Q2).**
3. Paraschiv M, Csiki M, Diaconeasa Z, Socaci S, Balacescu O, Rakosy-Tican E, **Cruceriu D**, **2022**. Phytochemical Profile and Selective Cytotoxic Activity of a *Solanum bulbocastanum* Dun. Methanolic Extract on Breast Cancer Cells. Plants. 11(23):3262 (**ISI IF$_{2022}$ = 4.50, AIS$_{2022}$ = 0.621, Q1).**
4. Gavrilas LI^{+}, **Cruceriu D**$^{+}$, Mocan A, Loghin F, Miere D, Balacescu O, **2022**. Plant-Derived Bioactive Compounds in Colorectal Cancer: Insights from Combined Regimens with Conventional

Chemotherapy to Overcome Drug-Resistance. Biomedicines. 10(8):1948 + - prim co-autori. (**ISI IF$_{2021}$ = 4.70, AIS$_{2021}$ = 0.798, Q1)**

5. Drețcanu G, Știrbu I, Leoplold N, **Cruceriu D**, Danciu C, Stănilă A, Fărcaș A, Borda IM, Iuhas C, Diaconeasa Z, **2022**. Chemical Structure, Sources and Role of Bioactive Flavonoids in Cancer Prevention: A Review. Plants. 11(9):1117. (**ISI IF$_{2022}$ = 4.50, AIS$_{2022}$ = 0.802, Q1)**
6. **Cruceriu D**, Diaconeasa Z, Socaci S, Socaciu C, Balacescu O, Rakosy-Tican E, **2021**. Extracts of the wild potato species *Solanum chacoense* on breast cancer cells: biochemical characterization, *in vitro* selective cytotoxicity and molecular effects. *Nutrition and Cancer*, 73(4):630-641 (**ISI IF$_{2021}$ = 2.810, AIS$_{2021}$ = 0.490, Q3**)
7. **Cruceriu D**, Diaconeasa Z, Socaci S, Socaciu C, Rakosy-Tican E, Balacescu O, **2020**. Biochemical profile, selective cytotoxicity and molecular effects of *Calendula officinalis* extracts on breast cancer cell lines. *Notulae Botanicae Horti Agrobotanici* **48**(1):24-39 (**ISI IF$_{2020}$ = 1.444, AIS$_{2020}$ = 0.202, Q3**)
8. **Cruceriu D**, Erdelyi-Molnár I, Diaconeasa Z, Margineanu AM, Auror A, Rakosy-Tican E, **2020**. Comparative characterization of polyphenols and antioxidant activity under wound stress and of trichomes in the somatic hybrids *Solanum bulbocastanum* + *S. tuberosum* cv. 'Rasant'. *Studia UBB Chemia* 65(2):133-148 (**ISI IF$_{2020}$ = 0.447, AIS$_{2020}$ = 0.051, Q4**)
9. **Cruceriu D**, Balacescu O, Rakosy-Tican E, **2018**. *Calendula officinalis*: potential roles in cancer treatment and palliative care. *Integrative Cancer Therapy* 17(4):1068-1078 (**ISI IF$_{2018}$ = 2.634, AIS$_{2018}$ = 0.630, Q1**)
10. **Cruceriu D**, Erdelyi-Molnár I, Sconta Z, Aurori A, Socaciu C, Rakosy-Tican E, **2017**. *In Vitro* Culture as a Stressful Factor Triggers Different Physiological Responses in Somatic Hybrids between *Solanum tuberosum* and *S. bulbocastanum. Notulae Botanicae Horti Agrobotanici*, 45(1):75-81 (**ISI IF$_{2017}$ = 0.648, AIS$_{2017}$ = 0.178, Q4)**

- **Articole BDI**

11. Rakosy-Tican E, Thieme R, Aurori A, Erdelyi-Molnár I, Besenyei E, Mustață RA, Mărgineanu AM, **Cruceriu D, 2016**. The Application of Combinatorial Biotechnology in Improving Potato Resistance to Biotic and Abiotic Stress. *Studia Biologia* 61(1):79-88 (**BDI**)

D. Lucrări publicate în ultimii 10 anii în reviste şi volume de conferinţe cu referenţi (neindexate)

- Reviste

- Selecţie cu maximum 20 lucrări în volume de conferinţe

Conferințe științifice internaționale

1. **Cruceriu D**, Gavrilas L, Baldasici O, **2023**. Curcumin reverses the irinotecan acquired resistance in colorectal cancer cells, *in vitro* (Prezentare), *The Annual International Conference of the Romanian Society of Biochemistry and Molecular Biology*, Cluj-Napoca

2. **Cruceriu D**, Gavrilas L, Baldasici O, Balacescu L, Balacescu O, **2023**. The potential of curcumin in reversing the acquired resistance to irinotecan in colorectal cancer cells (Prezentare – invited speaker), *Third Edition of the OncoHub International Conference*,, București
3. **Cruceriu D**, Rakosy E, Socaciu C, Balacescu O, **2018**. *Calendula officinalis*: in vitro selective cytotoxic activities against breast cancer (Prezentare), *The Annual International Conference of the Romanian Society of Biochemistry and Molecular Biology*, Bucureşti

12. Conferințe științifice naționale

-

E. Brevete obţinute în întreaga activitate

-

Data:
04.07.2025

Semnătura:
Șef lucrări dr. Cruceriu Daniel

E – Brevete (pentru întreaga activitate)

A N E X A 4 . 1

Nume Prenume: **Dobre Camelia**
Gradul didactic: Lector

Instituția unde este titular: Universitatea Babeș-Bolyai

Facultatea: Biologie și Geologie
Departamentul: Biologie moleculară și Biotehnologie

L I S T A
lucrărilor ştiinţifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

Studiu comparativ privind efectele metabolice ale rapamicinei in vitro și in vivo, la om și șoarece, 2006, Universitatea Babeș-Bolyai, coordonatorul științific: Prof. Dr, Corneliu Tarba, domeniul de doctorat: Biologie

B. Cărţi si capitole în cărţi publicate în ultimii 10 ani

1. **Lang C,** Vlad C, Factori de risc comportamentali în bolile cardiovasculare, în: Rolul nutriției în prevenirea bolilor cardiovasculare, pp. 93-108, Cristina Vlad (coordonator), Editura medicală universitară Iuliu Hațieganu, Cluj-Napoca, 2018
2. **Lang C,** Factori de risc alimentari în bolile cardiovasculare, pp. 109-122, în: Rolul nutriției în prevenirea bolilor cardiovasculare, Cristina Vlad (coordonator), Editura medicală universitară Iuliu Hațieganu, Cluj-Napoca, 2018
3. **Lang C,** Recomandări nutriționale pentru prevenirea și tratarea bolilor cardiovasculare, pp. 145-178, în: Rolul nutriției în prevenirea bolilor cardiovasculare, Cristina Vlad (coordonator), Editura medicală universitară Iuliu Hațieganu, Cluj-Napoca, 2018
4. **Lang C**, Anca E, Vlad C, Factori de risc comuni pentru cancer și bolile cardiovasculare, pp. 31-52, în: Manual de cardio-oncologie, Vlad C, Rădulescu D, Drăgan S, Burz C (coord.), Editura medicală universitară Iuliu Hațieganu, Cluj-Napoca, 2020

C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani

1. Anca E, Sabău F, Vădan A, Marinescu M, Licărete E, Roșioru C, Stoica A, **Dobre C**, Banciu M, Assessment of circulating biomarkers in a rat model of doxorubicin-induced cardiotoxicity, Studia Universitatis Babes-Bolyai, Biologia, 69 (2), 2024, 7-22
2. Anca E, Banciu M, Roșioru CL, **Dobre C**, Cardiac surveillance in Oncology: a review of circulating biomarkers and diagnosis methods in chemotherapy-induced cardiotoxicity, Farmacia J, 72, 2024, 5

3. Stoica AD, Toth S, **Dobre C**, Moț AC, The gastrointestinal tract receptivity to a conjugated ibuprofen – A computational study, Acta Phisiologica, 239, 2023
4. Stoica AD, Sevastre B, Suciu M, Pârvu AE, Pârvu M, Toma VA, Roman I, **Dobre C**, Chemoprotective effect of *Plantago sempervirens* crantz extract on ovarian structure and folliculogenesis, Appl Sci, 2023, 13, 3134
5. Stoica A, **Dobre C**, Natural strategies of preventing anthracycline-induced cardiotoxicity – a review, Studia Universitatis Babes-Bolyai, Biologia, 67 (2), 2022, 5-14
6. Munteanu C, Roșioru C, Tarba C, **Lang C**, Long-term consumption of energy drinks induces biochemical and ultrastructural alterations in the heart muscle, Anatol J Cardiol, **19**, 2018, 326-333.
7. Crişan M, Munteanu C, Roşioru C, **Lang C**, Red Bull induces biochemical changes in Wistar rat liver, Annals of the Romanian Society for Cell Biology, vol. XVIII (2), 2013, pp.118-122
8. Munteanu C, Uţiu I, Roşioru C, **Lang C**, Chronic Red Bull administration affects blood parameters in rats, Studia Universitatis Babes-Bolyai, Biologia, LIX (2), 2014, 89-98
9. Munteanu C, Cantor B, Tarba C, Grosu E, **Lang C**, Acute administration of Red Bull affects blood parameters in untrained and trained male rats, Studia Universitatis Babes-Bolyai, Biologia, LX (2), 2015, 75-84
10. Jula TC, Munteanu C, Rusu A, **Lang C**, Long term consumption of Red Bull and alcohol can affect rat skeletal muscle metabolism, Studia Universitatis Babes-Bolyai, Biologia, LXI (1), 2016, 167-175.

D. Lucrări publicate în ultimii 10 anii în reviste şi volume de conferinţe cu referenţi (neindexate)

- Reviste

- Selecţie cu maximum 20 lucrări în volume de conferinţe

1. Anca E, Lang C, Roșioru C, Vlad C, Candesartanul-potențial protector în cardiotoxicitatea indusă de antracicline, Zilele Universității de medicină Iuliu Hațieganu Cluj-Napoca, Dec. 2019, p. 60

E. Brevete obţinute în întreaga activitate

Data: **Semnătura:**

01.07.2025

A N E X A 4 . 1

Nume Prenume: **DRĂGHICI Ioana**
Gradul didactic: Șef de lucrări
Instituția unde este titular: Universitatea Babeș-Bolyai
Facultatea: Biologie și Geologie
Departamentul: Biologie Moleculară și Biotehnologie

L I S T A
lucrărilor ştiinţifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

Doctor in **Biologie** al **Universității "Babeș-Bolyai" din Cluj-Napoca – 14 Martie 2019**
Titlul tezei: ***"Maternal lineages of historical populations at the gates of Europe".***
Conducător științific: **Prof. Dr. BANCIU Horia Leonard**
Titlul a fost conferit în baza Ordinului Ministrului Educației, Cercetării și Tineretului **nr. 4193 din 29.05.2019**

B. Cărţi si capitole în cărţi publicate în ultimii 10 ani

-

C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani

- ISI, în calitate de autor principal

1. Mircea, C., **Rusu, I.**[*], Levei, E. A., Cristea, A., Gridan, I. M., Zety, A. V. & Banciu, H. L. 2024. The Fungal Side of the Story: Saprotrophic- vs. Symbiotrophic-Predicted Ecological Roles of Fungal Communities in Two Meromictic Hypersaline Lakes from Romania. *Microbial Ecology*, 87, 130, https://doi.org/10.1007/s00248-024-02446-4.
2. Paica, IC., **Rusu, I.**[*], Popescu, O., Brînzan, A., Pencea, I., Dobrinescu, C., Kelemen, B., 2023. Tentative indicators of malaria in archaeological skeletal samples, a pilot study testing different methods. *International Journal of Paleopathology*. 1;40:109-16. https://doi.org/10.1016/j.ijpp.2023.01.004.
3. Acatrinei, A., **Rusu, I.**[*], Mircea, C., Zagrean-Tuza, C., Gál, E., et al., 2021. Shedding Light on the Dark Ages: Sketching Potential Trade Relationships in Early Medieval Romania through Mitochondrial DNA Analysis of Sheep Remains. *Diversity*, 13(5), p.208, https://doi.org/10.3390/d13050208.

4. Gînguță, A., **Rusu, I.**[*], Mircea, C., Ioniță, A., Banciu, H.L. and Kelemen, B., 2021. Mitochondrial DNA Profiles of Individuals from a 12th Century Necropolis in Feldioara (Transylvania). *Genes*, 12(3), p.436, https://doi.org/10.3390/genes12030436.
5. **Rusu, I.**, Paica, I., Vulpoi, A., Radu, C., Mircea, C., Dobrinescu, C., Bodolică, V. and Kelemen, B., 2019. Dual DNA-protein extraction from human archeological remains. *Archaeological and Anthropological Sciences*, 11(7), pp.3299-3307, https://doi.org/10.1007/s12520-018-0760-1.
6. **Rusu, I.**, Modi, A., Radu, C., Mircea, C., Vulpoi, et al., 2019. Mitochondrial ancestry of medieval individuals carelessly interred in a multiple burial from southeastern Romania. *Scientific reports*, 9(1), pp.1-12, https://doi.org/10.1038/s41598-018-37760-8.
7. **Rusu, I.**, Radu, C., Țentea, O., Popescu, O. and Kelemen, B., 2019. A probable case of infantile cortical hyperostosis in 2nd–4th centuries AD Romania. *International journal of paleopathology*, 26, pp.8-13, https://doi.org/10.1016/j.ijpp.2019.05.004
8. **Rusu, I.**, Modi, A., Vai, S., Pilli, E., Mircea, C., et al., 2018. Maternal DNA lineages at the gate of Europe in the 10th century AD. *PLoS One*, 13(3), p.e0193578, https://doi.org/10.1371/journal.pone.0193578

- ISI, în calitate de coautor
  9. Topârcean, A. M., Acatrinei, A., **Rusu, I.**, Feștilă, D., Câmpian, R. S., Kelemen, B. & Ghergie, M. C. D. 2024. Genetic Insights into Skeletal Malocclusion: The Role of the *FBN3* rs7351083 SNP in the Romanian Population. *Medicina*, 60 (7), 1061, https://doi.org/10.3390/medicina60071061.
  10. Rosengren, E., Acatrinei, A., Cruceru, N., Dehasque, M., Haliuc, A., Lord, E., Mircea, C.I., **Rusu, I.**, et al., 2021. Ancient Faunal History Revealed by Interdisciplinary Biomolecular Approaches. *Diversity*, 13(8), p.370, https://doi.org/10.3390/d13080370.
  11. Mircea, C., Vulpoi, A., **Rusu, I.**, Radu, C., Pârvu, M. and Kelemen, B., 2019. Exploring post-excavation degradation potential of fungal communities associated with archaeological human remains. *Archaeometry*, 61(3), pp.750-763, https://doi.org/10.1111/arcm.12438.

- BDI
  12. Topârcean, A. M., Acatrinei, A., **Rusu, I.**, Mircea, C., Feștilă, D., Lucaciu, O. P., Câmpian, R. S., et al. 2024b. MATN1 gene variant (rs1065755) and malocclusion risk: Evidence from Romanian population analysis. *Studia Universitatis Babeş-Bolyai, Biologia*, 69(1), https://doi.org/10.24193/subbbiol.2024.1.09.
  13. Topârcean, A.M., Acatrinei, A., **Rusu, I.**, Mircea, C., Feştilă, D., et al., 2021. Preliminary data regarding the influence of the COLlal rs2249492 polymorphism on the risk of malocclusion in the Romanian population. *Studia Universitatis Babes-Bolyai, Biologia*, 66(2).
  14. Mățău, F., Matricală, A.L., Bele, A., **Rusu, I.**, Gorgan, D.L. and Bolohan, N., 2017. Diagenetic analysis and historical interpretations. Case studies from eastern Romania. *Studia Antiqua et Archaeologica*, 23(2), pp.227-247.

D. Lucrări publicate în ultimii 10 anii în reviste şi volume de conferinţe cu referenţi (neindexate)

- Reviste

-

- Selecţie cu maximum 20 lucrări în volume de conferinţe

1. **Drăghici I.**, **(2024)** Unlocking the Past: Exploring the Biocultural Landscape of a Pre-Modern Necropolis in Southeastern Romania, *BIOTA - Biodiversity, Traditions,and Present*, ed. IX (May 17-18, 2024), Cluj-Napoca (prezentare orală)
2. **Drăghici I.**, **(2023)** Unveiling malaria's traces through new hemozoin detection techniques, *International Symposium on Malaria Studies: Towards an Archaeology of Malaria*, 16 June 2023, University of Leiden (invited speaker, prezentare orală)
3. **Drăghici (Rusu) I.**, **(2023)** Popescu O., Vitalie B., Dobrinescu C., Kelemen B., A peek into the life and death of historical individuals with unknown cultural background from romanian archaeological context, *29th Annual Meeting of the European Association of Archaeologists (EAA)* in Belfast, Northern Ireland, 30 August - 2 September 2023 (poster)
4. **Rusu I**, Mircea C, Banciu HL. **(2022)** The fungal side of the story: saprotrophic- vs. symbiotrophic-predicted ecological roles of fungal communities in two hypersaline salt lakes from Romania. *13th Conference on Halophilic Microorganisms: HALOPHILES2022*, 26.06 – 29.06, Alicante, Spain (prezentare orală).
5. **Rusu I**, Modi A, Radu C, Mircea C, Vulpoi A, Dobrinescu C, Bodolică V, Potârniche T, Popescu O, Caramelli D, Kelemen B **(2018)** Mitogenomic data of medieval individuals “dumped” in a common burial pit from southeastern Romania. *EAA Barcelona*, 05.09-08.09, Barcelona, Spania (poster).
6. **Rusu I**, Radu C, Dobrinescu C, Bodolică V, Kelemen B **(2016)** The story told by Mireasa (Constanța) Bronze Age barrow -interdisciplinary approach. *EAA Vilnius*, 31.08 - 4.09, Vilnius, Lituania (prezentare orală).
7. **Rusu I (2016)** Methods for mitochondrial DNA typing in ancient human populations. *Young Researchers in BioSciences*, 25 - 31 iul., Cluj-Napoca, România (prezentare orală)
8. **Rusu I**, Urduzia C, Dobrinescu C, Kelemen B **(2015)** Genetics of a medieval population from Capidava, Constanța. Interethnic Relations in Transylvania. *Militaria Mediaevalia in Central and South-Eastern Europe*, 15 - 18 oct., Sibiu, România (prezentare orală).

E. Brevete obţinute în întreaga activitate

-

Data: 01.07.2025 **Semnătura: Șef lucrări dr. Ioana Drăghici**

E – Brevete (pentru întreaga activitate)

A N E X A 4 . 1

Nume Prenume: **Farkas Ancuţa Cristina**

Gradul didactic: Șef lucrări dr.

Instituția unde este titular: Universitatea Babeș-Bolyai

Facultatea: de Biologie și Geologie

Departamentul: de Biologie Moleculară și Biotehnologie

L I S T A
lucrărilor ştiinţifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

Doctor în Biologie cu calificativul *Summa Cum Laude*, Universitatea Babeş-Bolyai, Cluj-Napoca, domeniul Biologie

Titlul tezei de doctorat: *Comunităţi microbiene în biofilmele din staţia de tratare şi reţeaua de distribuţie a apei potabile din judeţul Cluj*

Conducător ştiinţific: Prof. Dr. Mihail Drăgan-Bularda

Data susţinerii doctoratului: 20 septembrie 2012

Ordinul Ministrului Educaţiei şi Tineretului nr. 6508 din 19.12.2012, Diploma de doctor nr. 1007 din 23.02.2013

B. Cărţi si capitole în cărţi publicate în ultimii 10 ani

1. **Farkas, A.** (2025) *Biotehnologii farmaceutice. Ghid pentru lucrări practice*. Editura Presa Universitară Clujeană, Cluj-Napoca
2. **Farkas, A.,** Carpa, R., Butiuc-Keul, A. (2022) *Biotehnologii generale. Ghid de lucrări practice.* Editura Presa Universitară Clujeană, Cluj-Napoca, România
3. **Farkas, A.** (2021) *Biotehnologii farmaceutice.* Editura Presa Universitară Clujeană, Cluj-Napoca, România
4. Coman C, Soran ML, **Farkas A.** (2016) Prelevarea probelor de mediu pentru investigarea reziduurilor de antibiotice, a diversităţii microbiene şi a rezistenţei la antibiotic. În: Coman, C. (Ed.) *Ghid metodologic de monitorizare a antibioticelor şi a rezistenţei la antibiotice în mediul înconjurător.* Editura Accent, Cluj-Napoca, România, pp. 25-41
5. Coman C, Soran ML, **Farkas A.** (2016) Environmental sampling for investigation of antibiotic residues, microbial diversity and antibiotic resistance. In: Coman C. (Ed). *Methodological guide for monitoring antibiotics and antibiotic resistance in the environment.* Accent Publisher, Cluj-Napoca, România, pp. 201-214
6. **Farkas A.** (2016) Testarea susceptibilităţii la antibiotice prin metoda antibiogramei. În: Coman, C. (Ed.) *Ghid metodologic de monitorizare a antibioticelor şi a rezistenţei la antibiotice în mediul înconjurător.* Editura Accent, Cluj-Napoca, România, pp. 79-104
7. **Farkas A.** (2016) Antibiotic susceptibility testing by disc diffusion method. In: Coman, C (Ed.). *Methodological guide for monitoring antibiotics and antibiotic resistance in the environment.* Accent Publisher, Cluj-Napoca, România, pp. 253-276

C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani

1. **Farkas, A.,** Butiuc-Keul, A., Carpa, R., Szekeres, E., Teban-Man, A., Coman, C. (2025). Overlooked Enterobacterales as hosts of antimicrobial resistance in aquatic environments. Scientific Reports. https://doi.org/10.1038/s41598-025-08090-3
2. Vatamanu, S.-M., Ţucureanu, M., Mihăilă, M., Butoi, E., **Farkas, A.** (2025). MΦ macrophage – N0 neutrophil dialogue in the presence of TNF-α affects the endothelium. Studia Universitatis Babeş-Bolyai Biologia 70(1), 303-326. https://doi.org/10.24193/subbbiol.2025.1.14
3. Pană, A.-G., Șchiopu, P., Țoc, D.A., Neculicioiu, V.S., Butiuc-Keul, A., **Farkas, A.,** Dobrescu, M.-Ș., Flonta, M., Costache, C., Szász, I.É., Junie, L.M. (2025) Clonality and the phenotype–genotype correlation of antimicrobial resistance in *Acinetobacter baumannii* isolates: A multicenter study of clinical isolates from Romania. Microorganisms 13, 176. https://doi.org/10.3390/microorganisms13010176
4. Carpa, R., **Farkas,** A., Dobrota, C., Butiuc-Keul, A. (2023). Double-network chitosan-based hydrogels with improved mechanical, conductive, antimicrobial, and antibiofouling properties. *Gels* 9(4), 278
5. Iordache, D., Baci, G.M., Căpriţă, O., **Farkas, A.,** Butiuc-Keul, A. (2022) Correlation between CRISPR loci diversity in three enterobacterial taxa. International Journal of Molecular Sciences 23(21), 12766
6. **Farkas, A.**, Coman, C., Szekeres, E., Teban-Man, A., Carpa, R., Butiuc-Keul, A. (2022) Molecular typing reveals environmental dispersion of antibiotic-resistant enterococci under anthropogenic pressure. Antibiotics 11(9), 1213
7. Hurdu, B.I., Coste, A., Halmagyi, A. Szatmari, P.M., **Farkas, A.**, Pușcaș, M., Turtureanu, P.D., Roșca-Casian, O., Tănase, C., Oprea, A., Mardari, C., Răduţoiu, D., Comănescu, P.C., Sîrbu, I.M., Stoie, A., Lupoae, P., Cristea, V., Jarda, I., Holobiuc, I., Goia, I., Cătană, C., Butiuc-Keul, A. (2022) Ex situ conservation of plant diversity in Romania: A synthesis of threatened and endemic taxa. Journal of Nature Conservation 68, 126211
8. Butiuc-Keul, A., Coste, A., Budahn, H., Dunemann, F., **Farkas, A.**, Postolache, D., Klocke, E. (2022) Analysis of *Hypericum* accessions by DNA fingerprinting and flow cytometry. Acta Botanica Croatica 81(1), 1-11
9. Butiuc-Keul, A., **Farkas, A.**, Carpa, R., Iordache, D. (2021) CRISPR-Cas system: The powerful modulator of accessory genomes in prokaryotes. Microbial Physiology 32(1-2), 2-17
10. Teban-Man, A., **Farkas, A.,** Baricz, A., Hegedus, A., Szekeres, E., Pârvu, M., Coman, C. (2021) Wastewaters, with or without hospital contribution, harbour MDR, carbapenemase-producing, but not hypervirulent *Klebsiella pneumoniae*. Antibiotics 10(4), 361
11. Butiuc-Keul, A., Carpa, R., Podar, D., Szekeres, E., Muntean, V., Iordache, D., **Farkas, A.** (2021) Antibiotic resistance in *Pseudomonas* spp. through the urban water cycle. Current Microbiology 78(4), 1227-1237
12. **Farkas, A.,** Mereuti, F., Butiuc-Keul, A., Podar, D., Roba, C., Bălc, R. (2020) Effects of long-term exposure to heavy metals upon rhizosphere bacteria from Baia Mare area (Maramureş County, Romania). Geomicrobiology Journal 37(9), 867-876
13. Cristea, V., Besenyei, E., Jarda, L., **Farkas, A.**, Marcu, D., Clapa, D., Halmagyi, A. Butiuc-Keul, A. (2019) *In situ* genetic variability and micropropagation of *Cerastium banaticum* (Rochel) Heuff. (*Caryophyllaceae*) – a rare and endemic species from Romania. Acta Biologica Cracoviensia 61(1), 53-62
14. Butiuc-Keul, A., Fiţ, D., **Farkas, A**. (2019) Trends in molecular biology of several fruit trees. JOJ Horticulture and Arboriculture 2(3), 555589
15. Butiuc-Keul, A., Coste, A., **Farkas, A.,** Cristea, V., Isac, V., Halmagyi, A. (2019) Molecular characterization of apple (*Malus*× *domestica* Borkh.) genotypes originating from three complementary conservation strategies. Turkish Journal of Agriculture and Forestry 43(5), 464-477

16. **Farkas, A.,** Tarco, E., Butiuc-Keul, A. (2019) Antibiotic resistance profiling of pathogenic *Enterobacteriaceae* from Cluj-Napoca, Romania. Germs 9(1), 17-27
17. Butiuc-Keul, A., Goia, I., Cristea, V. Fiţ, D., Şuteu, A., **Farkas, A.**, (2019) RAPD markers associated with linolenic acid synthesis in several *Boraginaceae* plant species. Analele Universităţii din Oradea. Fascicula Biologie 24(1), 62-66
18. Baricz, A., Teban, A., Chiriac, C.M., Szekeres, E., **Farkas, A.,** Nica, M., Dascălu, A., Oprişan, C., Coman, C. (2018) Investigating the potential use of an Antarctic variant of *Janthinobacterium lividum* for tackling antimicrobial resistance in a One Health approach. Scientific Reports 8(1), 15272
19. Butiuc-Keul, A., Jarda, L., Goia, I., Holobiuc, I., **Farkas, A.,** Cristea, V. (2018) Preliminary data regarding genetic diversity of several endangered and endemic *Dianthus* species from Romania generated by RAPD markers. Studia Universitatis Babes-Bolyai, Biologia 63(1), 59-72
20. Butiuc-Keul, A., Cristea, V., Goia, I., **Farkas, A.,** Crăciunş, C. (2018) Genetic structure of several endangered and endemic *Dianthus* species revealed by microsatellite markers. Acta Botanica Croatica 77(2), 181-188
21. Szekeres, E., Baricz, A., Chiriac, C.M., **Farkas, A.,** Opriş, O., Soran, M.L., Andrei, A.S., Rudi, K, Balcazar, J.L., Dragoş, N., Coman, C. (2017) Abundance of antibiotics, antibiotic resistance genes and bacterial community composition in wastewater effluents from different Romanian hospitals. Environmental Pollution 225, 304-315
22. Ganea, I.V., Roba, C., Gligor, D., **Farkas, A.,** Bălc, R., Moldovan, M. (2017) Assessment of environmental quality in Lacu Sarat area (Braila County, Romania). Carpathian Journal of Earth and Environmental Sciences 12(2), 377-387
23. **Farkas, A.,** Tarco, E., Crăciunaş, C., Bocoş, B., Butiuc-Keul, A. (2017) Screening for phenotypic and genotypic resistance to antibiotics in Gram positive pathogens. Studia Universitatis Babes-Bolyai, Biologia 62(2), 85-96
24. Raduly, O.C., **Farkas, A.** (2017) Nitrate, nitrite and microbial denitrification in drinking water from Ozun village (Covasna County, Romania) and the association between changes during water storage. Studia Universitatis Babes-Bolyai, Biologia 62(1), 17-28
25. **Farkas, A.,** Bocoş, B., Butiuc-Keul, A. (2016) Antibiotic resistance and intI1 carriage in waterborne Enterobacteriaceae. Water, Air, & Soil Pollution 227(7), 251
26. **Farkas, A.,** Crăciunaş, C., Chiriac, C.M., Szekeres, E., Coman., C., Butiuc-Keul, A. (2016) Exploring the role of coliform bacteria in class 1 integron carriage and biofilm formation during drinking water treatment. Microbial Ecology 72(4), 773-782
27. Butiuc-Keul, A., **Farkas, A.,** Cristea, V. (2016) Genetic stability assessment of in vitro plants by molecular markers. Studia Universitatis Babes-Bolyai 61(1), 107-114

D. Lucrări publicate în ultimii 10 anii în reviste şi volume de conferinţe cu referenţi (neindexate)

- Reviste

- Selecţie cu maximum 20 lucrări în volume de conferinţe

1. **Farkas, A.** (2021) Poluarea produsă de antibiotice. EcoDays, 10-20 Mai 2021, online – prezentare.
2. **Farkas, A.,** Butiuc-Keul, A., Crăciunaș, C., Carpa R., Podar, D., Muntean, V., Szoke-Nagy, T., Coman, C. (2017) Tracking antimicrobial resistance in aquatic environments: how much natural and how much anthropogenic? 2nd International Caparica Conference in Antibiotic Resistance, p. 131, 12-15 Iunie 2017, Caparica, Portugalia – prezentare.
3. Butiuc-Keul, A., **Farkas, A.,** Crăciunaș, C., Carpa R., Podar, D., Muntean, V., Szoke-Nagy, T., Coman, C. (2017) Prevalence of aminoglycoside resistance genes in hospital sewage, wastewater and surface waters. 2nd International Caparica Conference in Antibiotic Resistance, p. 277, 12-15 Iunie 2017, Caparica, Portugalia – poster.

4. Ráduly O.C., **Farkas A.** (2016) Rolul bacteriilor denitrificatoare în reducerea nitraților din sursele de apă potabilă. BioTA, 25-26 Martie, Cluj-Napoca – prezentare.
5. Dumitrică DI, **Farkas A.** (2016) Microbial processes in drinking water biofilm causing operational problems. Young Researchers in BioSciences, 25-31 Iulie, Cluj-Napoca – poster.
6. Cruceriu D., Chiriac C., Coman C.,Carpa R., Maior M.C., **Farkas A.**, Rudi K., Podar D., (2016) Diversity and metal resistance assessment of microbial communities within the rhizosphere of plants grown on mercury metalliferous soils, European Society for Soil Conservation (ESSC) Conference - Soil: our common future, p. 28, 15-18 Iulie, Cluj-Napoca – prezentare.

E. Brevete obţinute în întreaga activitate

Nu e cazul.

Data: **Semnătura:**

01.07.2025

A N E X A 4 . 1

Nume Prenume: **Mircea Cristina**
Gradul didactic: Şef de lucrări
Instituția unde este titular: Universitatea Babeș-Bolyai
Facultatea: Biologie şi Geologie
Departamentul: Biologie Moleculară și Biotehnologie

L I S T A
lucrărilor ştiinţifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

Doctor în **Biologie** al **Universității Babeş-Bolyai – 28 Iunie 2019.**
Titlul tezei: ***"Caracteristici biologice ale unor ciuperci tericole de pe diferite substraturi".***
(https://doctorat.ubbcluj.ro/ro/sustinerile-publice-ale-tezelor-de-doctorat/?an=2019&luna=6&facultate=0&domeniu=0)
Conducător științific: **Prof. Dr. Pârvu Marcel.**
Titlul a fost recunoscut în baza Ordinului Ministrului Educației Naţionale **nr. 4517 din 22.07.2019.**

C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani

În calitate de autor principal

1. **Mircea C**., Pârvu M., Tripon S.C., Roşca-Casian O, (2016), Morphological and Ultrastructural Characteristics of *Dumontinia tuberosa* (Bull.) LM Kohn from *Ranunculus ficaria* L., Notulae Botanicae Horti Agrobotanici, 44(2), 354-360. http://www.notulaebotanicae.ro/index.php/nbha/article/view/10583/7921

2. Roşca-Casian O., **Mircea C***., Vlase L., Gheldiu A.M., Teuca D.T., Pârvu M., (2017), Chemical composition and antifungal activity of *Hedera helix* leaf ethanolic extract. Acta Biologica Hungarica, 68 (2), 196-207. (*autor corespondent). https://akademiai.com/doi/abs/10.1556/018.68.2017.2.7

3. Moţ A.C., Pârvu M, Pârvu A.E., Roşca-Casian O., Dina N.E., Leopold N., Silaghi-Dumitrescu R., **Mircea C**., (2017), Reversible naftifine-induced carotenoid depigmentation in *Rhodotorula mucilaginosa* (A. Jörg.) F.C. Harrison causing onychomycosis, Scientific reports, 7, 11125. https://www.nature.com/articles/s41598-017-11600-7

4. **Mircea C**., Vulpoi A., Rusu I., Radu C., Pârvu M., Kelemen B. (2019). Exploring post-excavation degradation potential of fungal communities associated with archaeological human remains. Archaeometry, 61 (3), 750-763. https://onlinelibrary.wiley.com/doi/full/10.1111/arcm.12438

5. Văcar C. L., Ciorîță A., Tudoran C., Podar D., Carpa R., Leoștean C., Kacso I., **Mircea C**. (2023). Compact cold atmospheric pressure plasma cleaner suited for inhibiting bacterial biodeteriogens from paper archives. Journal of Cultural Heritage, 62, 198-205. https://doi.org/10.1016/j.culher.2023.05.027

6. **Mircea C**., Rusu I., Levei E. A., Cristea A., Gridan I. M., Zety A. V., Banciu H. L. (2024). The Fungal Side of the Story: Saprotrophic-vs. Symbiotrophic-Predicted Ecological Roles of Fungal Communities in Two Meromictic Hypersaline Lakes from Romania. Microbial Ecology, 87(1), 130. https://doi.org/10.1007/s00248-024-02446-4

În calitate de coautor

7. Rusu I., Modi A., Vai S., Pilli E., **Mircea C.**, Radu C., Urduzia C., Pinter Z.K., Bodolică V., Dobrinescu C., Hervella M., Popescu O., Lari M., Caramelli D., Kelemen B. (2018) Maternal DNA lineages at the gate of Europe in the 10th century AD, PloS one, 13(3):e0193578. https://doi.org/10.1371/journal.pone.0193578

8. Rusu I., Paica I., Vulpoi, A., Radu C., **Mircea C.**, Dobrinescu C., Bodolică V., Kelemen B. (2019). Dual DNA-protein extraction from human archeological remains. Archaeological and Anthropological Sciences, 1-9. https://doi.org/10.1007/s12520-018-0760-1

9. Rusu I., Modi A., Radu C., **Mircea C.**, Vulpoi A., Dobrinescu C., Bodolică V., Potârniche T., Popescu O., Caramelli D., Kelemen, B. (2019). Mitochondrial ancestry of medieval individuals carelessly interred in a multiple burial from southeastern Romania. Scientific reports, 9(1), 961 https://doi.org/10.1038/s41598-018-37760-8

10. Pârvu M., Mot C. A., Parvu A. E., **Mircea C**., Stoeber L., Rosca-Casian O., Tigu A. B. (2019). *Allium sativum* Extract Chemical Composition, Antioxidant Activity and Antifungal Effect against *Meyerozyma guilliermondii* and *Rhodotorula mucilaginosa* Causing Onychomycosis, Molecules, 24(21), 3958. https://doi.org/10.3390/molecules24213958

11. Țigu A. B., Moldovan C. S., Toma V. A., Farcaș A. D., Moț A. C., Jurj A., Fischer-Fodor E., **Mircea** C., Pârvu, M. (2021). Phytochemical analysis and in vitro effects of Allium fistulosum L. and Allium sativum L. extracts on human normal and tumor cell lines: a comparative study. Molecules, 26(3), 574. https://doi.org/10.3390/molecules26030574

12. Ciorîță A., Tripon S. C., Mircea I. G., Podar D., Barbu-Tudoran L., **Mircea C**., Pârvu, M. (2021). The Morphological and Anatomical Traits of the Leaf in Representative Vinca Species Observed on Indoor-and Outdoor-Grown Plants. Plants, 10(4), 622. https://doi.org/10.3390/plants10040622

13. Gînguță A., Rusu I., Mircea C., Ioniță A., Banciu H. L., Kelemen B. (2021). Mitochondrial DNA Profiles of Individuals from a 12th Century Necropolis in Feldioara (Transylvania). Genes, 12(3), 436. https://doi.org/10.3390/genes12030436.

14. Acatrinei A., Rusu I., Mircea C., Zagrean-Tuza C., Gál E., Păceșilă D., Gâza O., Urduzia C, Pinter Z. K., Dobrinescu C., Bodolică V., Pintea A., Kelemen B. 2021. Shedding Light on the Dark Ages: Sketching Potential Trade Relationships in Early Medieval Romania through Mitochondrial DNA Analysis of Sheep Remains. Diversity, 13(5), 208. https://doi.org/10.3390/d13050208.

15. Rosengren E., Acatrinei A., Cruceru N., Dehasque M., Haliuc A., Lord E., Mircea C., Rusu I., Mármol-Sánchez E., Kelemen B. S, Meleg I. N. (2021). Ancient Faunal History Revealed by Interdisciplinary Biomolecular Approaches. Diversity, 13(8), 370. https://doi.org/10.3390/d13080370

16. Văcar C. L., **Mircea C.**, Pârvu M., & Podar D. (2022). Diversity and metabolic activity of fungi causing biodeterioration of canvas paintings. Journal of Fungi, 8(6), 589. https://doi.org/10.3390/jof8060589

17. Golea M., García-Vázquez A., **Mircea C.**, Cârciumaru M., Sava G., Mueller J., Kirleis W., Lazăr, C. (2023). Revisiting Archived Rye Grains Discovered at the Neolithic Site Cunești (Romania). Radiocarbon, 65(3), 771-788. https://doi.org/10.1017/RDC.2023.22

18. Ilieș D. C., Apopei A. I., **Mircea C.**, Ilieș, A., Caciora T., Zharas, B., ... & Noje I. C. (2024). Investigating the Role of Microclimate and Microorganisms in the Deterioration of Stone Heritage: The Case of Rupestrian Church from Jac, Romania. Applied Sciences, 14(18), 8136. https://doi.org/10.3390/app14188136

19. **Mircea C.,** Kelemen B. (2014). The evolution of gender detection protocols in Bioarchaeological studies, Studia Universitatis Babeş-Bolyai Biologia, LIX, 127-134, http://studia.ubbcluj.ro/serii/biologia/biologia_eval_en.html

20. Topârcean A. M., Acatrinei A., Rusu I., **Mircea C.**, Feștilă D., Lucaciu O. P., Câmpian R.S., Bodo O., Kelemen B., Ghergie, M. C. D. (2021). Preliminary data regarding the influence of the COLlal rs2249492 polymorphism on the risk of malocclusion in the Romanian population. Studia Universitatis Babes-Bolyai, Biologia, 66(2).

21. Topârcean, A. M., Acatrinei, A., Rusu, I., Mircea, C., Feștilă, D., Lucaciu, O. P., Dinu Ghergie, M. C. (2024). MATN1 gene variant (rs1065755) and malocclusion risk: Evidence from Romanian population analysis. Studia Universitatis Babeş-Bolyai, Biologia, 69(1).

Data:
01.07.2025

Semnătura:
Mircea

A N E X A 4 . 1

Nume Prenume: **Moisă Mădălina Elena**
Gradul didactic: Lector

Instituția unde este titular: Universitatea Babeș-Bolyai

Facultatea: Chimie și Inginerie Chimică
Departamentul: Chimie

L I S T A
lucrărilor ştiinţifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

Doctorat in Chimie (2019)- Lipaze proiectate pentru dezvoltarea de bioprocese
Universitatea Babeș-Bolyai, Conducător științific: Prof. Habil. Dr. Ing. Monica Ioana Toșa

B. Cărţi si capitole în cărţi publicate în ultimii 10 ani

C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani

1. Tomoiagă R. B., Nagy L. C., Boros K., Moisă M. E., Bencze L. C., Engineered Biocatalysts for the Asymmetric Synthesis of d-Phenylalanines, *ACS Catal.* **2025**, DOI:10.1021/acscatal.5c00837.
2. Stroia I., Moisă M. E., Pop A., Legrand B., Hanganu A., Hădade N. D., Grosu I., Planar Chiral p,p′-Terphenyl-Based Cyclophanes with Remarkable Enantiomer Stability: Synthesis, Theoretical Investigations, and Complexation Studies, *J. Org. Chem*. **2023**, 88(22), 15647-15657.
3. Tork S. D.*, Moisă M. E.*, Cserepes L., Filip A., Nagy L. C., Irimie F. D., Bencze L. C., Towards a general approach for tailoring the hydrophobic binding site of phenylalanine ammonia-lyases, *Sci. Rep*. **2022**, 12:10606. (*equal contribution)
4. Gal C. A., Barabás L. E., Bartha Vári J.-H., Moisă M. E., Balogh-Weiser D., Bencze L. C., Poppe L., Paizs C., Toșa M. I., Lipase on carbon nanotube - An active, selective, stable and easy to optimize nanobiocatalyst for kinetic resolutions, *React. Chem. Eng*. **2021**, 6, 2391-2399.
5. Boros K.*, Moisă M. E.*, Nagy C. L., Paizs C., Toşa M. I., Bencze L.C. Robust, site-specifically immobilized phenylalanine ammonia-lyases for the enantioselective ammonia addition of cinnamic acids, *Catal. Sci. Technol*. **2021**, 11, 5553-5563. (*equal contribution)
6. Moisă M. E., Amariei D. A., Nagy E. Z. A., Szarvas N., Toşa M. I., Paizs C., Bencze L. C. Fluorescent enzyme-coupled activity assay for phenylalanine ammonia-lyases, *Sci. Rep*. **2020**, 10, 18418-18428.
7. Bartha-Vári J.-H., Moisă M. E., Bencze L. C., Irimie F.-D., Paizs C., Toşa M. I. Efficient Biodiesel Production Catalyzed by Nanobioconjugate of Lipase from *Pseudomonas fluorescens*, *Molecules* **2020**, 25(3), 651-662.

8. Moisă M. E., Bencze L. C., Paizs C., Toşa M. I. Continuous-flow enzymatic kinetic resolution mediated by a lipase nanobioconjugate, *Studia UBB Chemia* **2019**, LXIV, 2, Tom I, 79-86.
9. Lar C., Moisă M. E., Bogdan E., Terec A., Hădade N. D., Grosu I., David L., Paizs C., Grosu I. G., "Geländer" macrocycles: Synthesis, chirality and racemisation barriers, *Tetrahedron Letters* **2019**, 60, 335-340.
10. Moisă M. E., Poppe L., Gal C. A., Bencze L. C., Irimie F. D., Paizs C., Péter F., Toşa M. I., Click reaction-aided enzymatic kinetic resolution of secondary alcohols, *Reaction Chemistry & Engineering* **2018**, 3, 790-798.
11. Moisă M. E., Spelmezan C. G., Paul C., Bartha-Vári J. H., Bencze L. C., Irimie F. D, Paizs C., Péter F., Toşa M. I., Tailored sol–gel immobilized lipase preparates for the enzymatic kinetic resolution of heteroaromatic alcohols in batch and continuous flow systems, *RSC Advances* **2017**, 7, 52977-52987.
12. Nagy B., Moisă M., Filip A., Bencze L. C., Toşa M. I. Lipase catalyzed parallel kinetic resolution of ibuprofen, *Studia UBB Chemia* **2016**, 61(4), 255-266.

D. Lucrări publicate în ultimii 10 anii în reviste şi volume de conferinţe cu referenţi (neindexate)

- Reviste

- Selecţie cu maximum 20 lucrări în volume de conferinţe

1. Bălan A. G., Popa A. D., Marian A. M., Moisă M. E., *Supports for enzyme immobilization - searching for the best*, 21st International Conference Students for students, Cluj-Napoca (România), **2025**
2. Moisă M. E., Pap M., Paizs C., Bencze L. C., Toşa M. I., *Immobilized phenylalanine ammonia-lyase from Arabidopsis thaliana for continuous-flow production of L-amino acids*, 10th International Conference on Materials Science and Condensed Matter Physics (MSCMP 2024), Chișinău (Moldova), **2024**
3. Moisă M. E., Pap M., Paizs C., Bencze L. C., Toşa M. I., *Immobilized phenylalanine ammonia-lyase from Arabidopsis thaliana for the synthesis of D- and L-phenylalanines*, 5th European Summer School on Microfluidics (EUROMBR), Catanzaro (Italy), **2024**
4. Moisă M. E., Pap M., Paizs C., Bencze L. C., Toşa M. I., *Immobilization of phenylalanine ammonia-lyase from Arabidopsis thaliana for continuous-flow processes*, 7th International, Conference Implementation of Microreactor Technology in Biotechnology (IMTB), Zadar (Croatia), **2024**
5. Moisă M. E., Paizs C., Bencze L. C., Toşa M. I., Site-specific Immobilization of Phenylalanine Ammonia-lyase from Arabidopsis thaliana, European Biotechnology Congress, Ljubljana (Slovenia), **2023**
6. Soc A., Bălan A. G., Moisă M. E., *Protein engineered phenylalanine ammonia-lyase from Arabidopsis thaliana: setting the ground for site-specific immobilization*, 19th International Conference Students for students, Cluj-Napoca (România), **2023**
7. Moisă M. E., Bartha-Vári J.-H., Bencze L. C., Irimie F. D., Paizs C., Toşa M. I., *Site-specifically immobilized phenylalanine ammonia lyases for continuous flow processes*, The 13th International Symposium of the Romanian Catalysis Society, RomCat Conference, Băile Govora, România, **2022**
8. Tork S. D., Moisă M. E., Bencze L. C., *Redesigning phenylalanine ammonia-lyases for non-natural substrates*, Young Researchers' International Conference on Chemistry and Chemical Engineering (YRICCCE III), Cluj-Napoca (România), **2021**
9. Moisă M. E., Amariei D., Tomoiagă R. B., Szarvas N., Toşa M. I., Paizs C., Bencze L. C., *High-Throughput Fluorescence Assay for Phenylalanine Ammonia Lyase Activity*, 14th International

Symposium on Biocatalysis and Biotransformations (BioTrans 2019), Groningen (Netherlands), **2019**

10. Moisă M. E., Poppe L., Irimie F. D., Toşa M. I., Paizs C., *Click Reaction Strategy for the Efficient Separation of EKR Products,* 13th International Symposium on Biocatalysis and Biotransformations (BioTrans 2017), Budapest (Hungary), **2017**
11. Moisă M. E., *Sinteza stereoselectivă a unor alcooli secundari heteroaromatici prin rezoluţie cinetică enzimatică în sistem continuu*, Conferinţa Interdisciplinară a Doctoranzilor Universităţii Babeş-Bolyai, Baru-Mare (România), **2017**
12. Moisă M. E., Paizs C., Poppe L., Irimie F. D., Toşa M. I., *Click Reactions for Efficient Enzymatic Kinetic Resolution Processing*, 3rd Symposium „Biotransformations 2016", Warsaw (Poland), **2016**
13. Moisă M. E., Paizs C., Irimie F. D., Toşa M. I., *Click chemistry – an efficient tool in biocatalysis*, Young Researchers' International Conference on Chemistry and Chemical Engineering (YRICCCE I), Cluj-Napoca (Romania), **2016**
14. Moisă M. E., Paizs C., Poppe L., Irimie F. D., Toşa M. I., *Click Reaction Strategy Applied in the Enzymatic Kinetic Resolution Processes,* „Systems Biocatalysis" COST Training School, Siena (Italy), **2016**
15. Moisă M. E., Paizs C., Irimie F. D., Péter F., Toşa M. I., *Novel Immobilized Lipases Preparations for the Heteroaromatic Ethanols Resolution by EKR,* 10th European Congress of Chemical Engineering + 3rd European Congress of Applied Biotechnology + 5th European Process Intensification Conference, Nice (France), **2015**
16. Moisă M. E., Paizs C., Irimie F. D., Péter F., Toşa M. I., *Activity and Stereoselectivity Studies of Some Novel Immobilized Lipases Preparations on Heteroaromatic Ethanols and β-Hydroxy Esters,* 15th International Symposium and Summer School on Bioanalysis, Târgu Mureş (Romania), **2015**
17. Moisă M. E., *Studii de activitate, selectivitate şi stabilitate ale unor preparate noi de lipaze imobilizate pentru EKR a unor etanoli heteroaromatici*, POSDRU/187/1.5/S/155383 "Calitate, excelență, mobilitate transnațională în cercetarea doctorală", Băile Felix (România), **2015**

E. Brevete obţinute în întreaga activitate

Data: 01.07.2025 **Semnătura:**

A N E X A 4 . 1

Nume Prenume: **Moldovan Bianca-Elena**
Gradul didactic: Lector

Instituția unde este titular: Universitatea Babeș-Bolyai

Facultatea: de Chimie si Inginerie Chimica
Departamentul: de Chimie

L I S T A
lucrărilor ştiinţifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

Doctorat în Chimie. Titlul tezei "Contributions to the study of multiple hydrogen rearrangements in mass spectra of synthetic esters and to the investigation of the properties of some natural compounds with polyphenolic structures"

B. Cărţi si capitole în cărţi publicate în ultimii 10 ani

B1. L. David, **B. Moldovan**, "Extraction, characterization and potential health benefits of bioactive compounds from selected *Cornus* fruits". In: Owen J. P. editor. Fruits and pomace extracts: biological activity, potential applications and beneficial health effects. New-York, Nova Science Publishers, Inc. **2015**, pp. 157-188

C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani

C1. P.L. Dulf, C. A. Coadă, A. Florea, R. Moldovan, I. Baldea, D. V. Dulf, D. Blendea, L. David, **B.Moldovan**, V. I. Morosan, S. Macavei, G. A. Filip „Doxorubicin Incorporation into Gold Nanoparticles: An In Vivo Study of Its Effects on Cardiac Tissue in Rats" *Nanomaterials*, **2024**, *14(20)*, 1647

C2. G.A Filip, S. Clichici, C. Muresan, A. Nistor, I. Baldea, **B. Moldovan**, L. David, R. Vulturar, R. Suharoschi," The effect of gold and silver nanoparticles capped with *Cornus mas* L. extract on PI3K-AKT signaling pathway genes expression in oral dysplastic keratinocytes" *Acta Physiologica*, **2024**, *240*, 76

C3. M. Filip, I. Baldea, L. David, **B. Moldovan**, G.C. Flontas, S. Macavei, D.M. Muntean, N. Decea, A.B. Tigu, S.V. Clichici, "Hybrid Material Based on *Vaccinium myrtillus* L. Extract and Gold Nanoparticles Reduces Oxidative Stress and Inflammation in Hepatic Stellate Cells Exposed to TGF-β", *Biomolecules*, **2023**, *13(8)*, 1271

C4. M. Moldovan, A.M. Papurica, M. Muntean, R.M. Bungardean, D. Gheban, **B. Moldovan**, G. Katona, L. David, G.A. Filip, "Effects of Gold Nanoparticles Phytoreduced with Rutin in an Early Rat Model of Diabetic Retinopathy and Cataracts", *Metabolites*, **2023**, *13(8)*, 955

C5. L. David, V. Morosan, **B. Moldovan***, G.A. Filip, I. Baldea "Goji-Berry-Mediated Green Synthesis of Gold Nanoparticles and Their Promising Effect on Reducing Oxidative Stress and Inflammation in Experimental Hyperglycemia" *Antioxidants*, **2023**, *12*, 1489

C6. C. Bidian, G.A. Filip, L. David, **B. Moldovan**, D. Olteanu, S. Clichici, M.C. Olanescu-Vaida-Voevod, C. Leostean, S. Macavei, D.M. Muntean, M. Cenariu, A. Albu, I. Baldea, "Green Synthesized Gold and Silver Nanoparticles Increased Oxidative Stress and Induced Cell Death in Colorectal Adenocarcinoma Cells" *Nanomaterials*, **2023**, *13(7)*, 1251

C7. R. Moldovan, D.R. Mitrea, A. Florea, L. David, L.E. Muresan, I.C. Chis, S.M.Suciu, **B.E.Moldovan**, M. Lenghel, L.B. Chiriac, I. Ielciu, D. Hanganu, T. Bab, S. Clichici, " Effects of Gold Nanoparticles Functionalized with *Cornus mas* L. Fruit Extract on the Aorta Wall in Rats with a High-Fat Diet and Experimental-Induced Diabetes Mellitus-An Imaging Study", *Nanomaterials*, **2023**, *13(6)*, 1101

C8. L. David, **B. Moldovan***, "Optimization of the eco-friendly synthesis of silver nanoparticles using goji berries' bioactive compounds", *Studia Universitatis "Babeş-Bolyai", Seria Chemia*, **2022**, *63*, 37-44

C9. R. Moldovan, D. R. Mitrea, A. Florea, I. C. Chiş, Ş. Suciu, L. David, **B. E. Moldovan**, L. E. Mureşan, M. Lenghel, R. A. Ungur, R. V. Opriş, N. Decea S. V. Clichici, "Effects of Gold Nanoparticles Functionalized with Bioactive Compounds from *Cornus mas* Fruit on Aorta Ultrastructural and Biochemical changes in Rats on a Hyperlipid Diet -A Preliminary Study", *Antioxidants*, **2022**, *11*, 1343

C10. C. Bidian, G.A.Filip, L. David, **B. Moldovan**, I. Baldea, D. Oltean, M. Filip, P. Bolfa, M. Potara, A.M. Toader, S. Clichici, *"Viburnum opulus* fruit extract-capped gold nanoparticles attenuated oxidative stress and acute inflammation in carrageenan-induced paw edema model", *Green Chemistry Letters and Reviews*, **2022,** *15 (2),* 319-335

C11. R.V. Opris, V. Toma, A.M. Baciu, R. Moldovan, B. Dume, A. Berghian-Sevastre, **B. Moldovan**, S. Clichici, L. David, G.A. Filip, A. Florea, "Neurobehavioral and ultrastructural changes induced by phytosynthesized silver-nanoparticle toxicity in an in vivo rat model", *Nanomaterials*, **2022**, *12(1)*, 58

C12. C.N. Tiboc Schnell, G.A. Filip, N. Decea, R. Moldovan, R. Opris, S.C. Man, **B. Moldovan**, L.David, F. Tabaran, D. Olteanu, A. M. Gheldiu, I. Baldea, "The impact of *Sambucus nigra* L. extract on inflammation, oxidative stress and tissue remodeling in a rat model of lipopolysaccharide-induced subacute rhinosinusitis", *Inflammopharmacology*, **2021**, *29*, 753-769

C13. G.A. Filip, A. Florea, D. Olteanu, S. Clichici, L. David, **B. Moldovan*,** M. Cenariu, I. Scrobota, M. Potara, I. Baldea , "Biosynthesis of silver nanoparticles using *Sambucus nigra* L. fruit extract for targeting cell death in oral dysplastic cells", *Materials Science and Engineering C: Materials for Biological Applications*, **2021**, *123, 111974*

C14. C. Bidian, G.A. Filip, L. David, A. Florea, **B. Moldovan,** D. Popa Robu, D. Olteanu, T. Radu, S. Clichici, D.R. Mitrea, I. Baldea, "The impact of silver nanoparticles phytosynthesized with *Viburnum opulus* L. extract on the ultrastrastructure and cell death in the testis of offspring rats", *Food and Chemical Toxicology*, **2021**,*150*, 112053

C15**. B. Moldovan**, L. David, "Influence of different sweeteners on the stability of anthocyanins from Cornelian Cherry juice", *Foods*, **2020**, *9*, 1266

C16. L. David, **B. Moldovan**, "Green synthesis of biogenic silver nanoparticles for efficient catalytic removal of harmful organic dyes", *Nanomaterials*, **2020,** *10*, 202

C17. E.M. Domsa, G.A. Filip, D. Olteanu, I. Baldea, S. Clichici, A. Muresan, L. David, **B. Moldovan,** I. Para, V. Negrean, V. Andreica, "Gold nanoparticles phytoreduced with Cornus mas extract mitigate some of gliadin effects on Caco-2 cells", *Journal of Physiology and Pharmacolgy*, **2020,** *71*, 201-212

C18. I. P. Laszlo, M. R. Laszlo, V. Toma, I. Bâldea, D. Olteanu, L. David, **B. Moldovan**, R.M. Ion, R. Moldovan, G. A. Filip, G. Kacso, C. Cainap, S. Clichici, A. Mureşan, "The *in vivo* modulatory effects of *Cornus mas* extract on photodynamic therapy in experimental tumors", *Photodiagnosis and Photodynamic Therapy*, **2020**, *30*, 101656

C19**. B. Moldovan**, L. David, "Effect of some antioxidant additives on the degradation of Cornelian cherry anthocyanins", *Studia Universitatis "Babeş-Bolyai" Chemia*, **2020**, *65*, 83-92

C20. S. Clichici, L. David, **B.Moldovan***, I. Baldea, D. Olteanu, M. Filip, A. Nagy, V. Luca, C. Crivii, P. Mircea, G. Katona, G. A. Filip, "Hepatoprotective effects of Silymarin coated gold nanoparticles in experimental tumors ", *Materials Science and Engineering C: Materials for Biological Applications*, **2020**, *115*, 111117

C21. L. David, **B.Moldovan***, I. Baldea, D. Olteanu, P. Bolfa, S. Clichici, G. A. Filip, "Modulatory effects of *Cornus sanguinea* L. mediated green synthesized silver nanoparticles on oxidative stress, COX-2/NOS2 and NFkB/pNFkB expressions in experimental inflammation in Wistar rats", *Materials Science and Engineering C: Materials for Biological Applications,* **2020**, *110,* 110709

C22. I. Baldea, A. Florea, D. Olteanu, S. Clichici, L. David, **B. Moldovan,** M. Cenariu, M. Achim, R. Suharoschi, S. Danescu, A. Vulcu, G. A. Filip, "Effects of silver and gold nanoparticles phytosynthesized with Cornus mas extract on oral dysplastic human cells", *Nanomedicine***, 2020,** *15(1),* 55-75

C23. L.David, V. Danciu, **B.Moldovan***, A. Filip, "Effects of *in vitro* gastrointestinal digestion on the antioxidant capacity and anthocyanin content of Cornelian cherry fruit extract", *Antioxidants,* **2019,** *8(5),* 114

C24. **B. Moldovan**, A. Ardelean, L. David, "Degradation kinetics of anthocyanins during heat treatment of wild blackthorn (*Prunus spinosa* L.) fruits extract', *Studia Universitatis "Babeş-Bolyai" Chemia*, **2019**, 64 (2), 401-410 23.

C25. *G.A.*Filip*, **B. Moldovan***, I. Baldea, D. Olteanu , R. Suharoschi , N. Decea , C. M. Cismaru , E. Gal , M. Cenariu , S. Clichici , L. David, "UV-light mediated green synthesis of silver and gold nanoparticles using Cornelian cherry fruit extract and their comparative effects in experimental inflammation", *Journal of Photochemistry & Photobiology, B: Biology,* **2019,** *191,* 26-37

C26. R. Opris, V. Toma, D. Olteanu, I. Baldea, A. Baciu, F. Imre-Lucaci, A. Berghian-Sevastre, C. Tatomir, **B. Moldovan,** S. Clichici, L.David, A. Florea, G.A. Filip, "Effects of silver nanoparticles functionalized with Cornus mas L. extract on architecture and apoptosis in rat testicle", *Nanomedicine*, **2019**, *14 (3),* 275-299

C27. **B.Moldovan**, V. Sincari, M. Perde-Schrepler, L.David, "Biosynthesis of silver nanoparticles using Ligustrum ovalifolium fruits and their cytotoxic effects", *Nanomaterials,* **2018**, *8(8),* 627

C28. O. Danila, A. Sevastre Berghian, V. Dionisie, D. Gheban, D. Olteanu, F. Tabaran, I. Baldea, G. Katona, **B. Moldovan**, S. Clichici, L. David, G.A.Filip, "*T*he effects of silver nanoparticles on behavior, apoptosis and nitro-oxidative stress in offspring Wistar rats", *Nanomedicine*, **2017**, *12*, 1455-1473

C29. R. Opris, C. Tatomir, D. Olteanu, R. Moldovan, **B. Moldovan**, L. David, A. Nagy, N. Decea, M. Kiss, G. A. Filip, "The effect of *Sambucus nigra* L. extract and phytosynthesized gold nanoparticles on diabetic rats", *Colloids and Surfaces B: Biointerfaces,* **2017**, *150,* 192-200

C30. **B. Moldovan**, L. David, "Bioactive Flavonoids from *Cornus Mas* L. Fruits", *Mini-Reviews in Organic Chemistry*, **2017**, 14(6), 489-495

C31. **B. Moldovan**, L. David, S. C. Man, "Impact of thermal treatment on the antioxidant activity of cornelian cherries extract", *Studia Universitatis "Babeş-Bolyai" Chemia*, **2017**, *62*, 311-317

C32. **B.Moldovan,** L.David, A. Vulcu, L.Olenic, M. Perde-Schrepler, E. Fischer-Fodor, I. Baldea, S. Clichici, G. A. Filip, "In vitro and in vivo anti-inflammatory properties of green synthesized silver nanoparticles using Viburnum opulus L. fruits extract", *Materials Science and Engineering C: Materials for Biological Applications,* **2017**, *79,* 720-727

C33. **B. Moldovan**, A. Hosu, L. David, C. Cimpoiu, "Total phenolics, anthocyanins, antioxidant and pro-oxidant activity of some red fruits teas", *Acta Chimica Slovenica*, **2016**, *63(2),* 213-219

C34. **B. Moldovan**, A. Popa, L. David, "Effects of storage temperature on the total phenolic content of Cornelian cherry (*Cornus mas* L.) fruits extracts", *Journal of Applied Botany and Food Quality*, **2016**, 89, 208-211

C35. **B. Moldovan**, B. Iasko, L. David, "Antioxidant activity and total phenolic content of some commercial fruit-flavored yogurts", *Studia Universitatis "Babeş-Bolyai" Chemia*, **2016**, LXI(3), 101-108

C36. **B. Moldovan,** A. Filip, S. Clichici, R. Suharovschi, P. Bolfa, L. David, "Antioxidant Activity of Cornelian Cherry (*Cornus mas* L.) Fruits Extracts and the *In Vivo* Evaluation of their Anti-inflammatory Effects", *Journal of Functional Foods*, **2016**, *26*, 77-87

C37. A. Hosu, C. Cimpoiu, L. David, **B. Moldovan**, "Study of the antioxidant property variation of Cornelian cherry fruits during storage using HPTLC and spectrophotometric assays", *Journal of Analytical Methods in Chemistry*, **2016**, Article ID 2345375

C38. **B. Moldovan**, L. David, M. Achim, S. Clichici, G.A. Filip, "A green approach to phytomediated synthesis of silver nanoparticles using Sambucus nigra L. fruits extract and their antioxidant activity", *Journal of Molecular Liquids*, **2016**, *221*, 271-278 37.

C39. A. Filip, M. Potara, A. Florea, I. Baldea, D. Olteanu, P. Bolfa, S. Clichici, L. David, **B. Moldovan**, L. Olenic, S. Astilean , "Comparative evaluation by scanning confocal Raman spectroscopy and transmission electron microscopy of therapeutic effects of noble metal nanoparticles in experimental acute inflammation", *RSC Advances*, **2015**, *5*, 67435-67448

C40. A. Popa, **B. Moldovan**, L. David, "Betanin from red beet (*Beta vulgaris L.)*: Extraction conditions and evaluation of the thermal stability", *Revista de Chimie*, **2015**, *66*, 413-416

C41. **B. Moldovan**, R. Mintău, L. David, "Thermal stability of anthocyanins from Common dogwood (*Cornus sanguinea* L.) fruits", *Studia Universitatis "Babeş-Bolyai" Chemia*, **2015**, *60*, 139-146

D. Lucrări publicate în ultimii 10 anii în reviste şi volume de conferinţe cu referenţi (neindexate)

- Reviste

D1.

- Selecţie cu maximum 20 lucrări în volume de conferinţe

1.

E. Brevete obţinute în întreaga activitate

E1.

Data: **Semnătura:**

01.07.2025

A N E X A 4 . 1

Nume Prenume: **Rauca Valentin-Florian**
Gradul didactic: Șef lucrări dr.
Instituția unde este titular: Universitatea Babeș-Bolyai
Facultatea: Biologie și Geologie
Departamentul: Departamentul de Biologie Moleculară şi Biotehnologie

L I S T A
lucrărilor științifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

RAUCA V. Valentin-Florian. *Exploiting the therapeutic potential of oxidative stress modulators in melanoma/Exploatarea potențialului terapeutic al unor agenți ai modulării stresului oxidativ în melanom.* Dată susținere publică: 31.07.2020, an emitere OM 2020. Cod dosar: F-CA-31289/25.08.2020 Scientific Supervisor: Prof. dr. Elena Rakosy

B. Cărţi si capitole în cărţi publicate în ultimii 10 ani

1.

C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani

1. Alina Sesarman, Lavinia Luput, **Valentin-Florian Rauca***, Laura Patras, Emilia Licarete, Marta-Szilvia Meszaros, Bogdan Razvan Dume, Giorgiana Negrea, Vlad-Alexandru Toma, Dana Muntean, Alina Porfire. Targeting of M2 macrophages with IL-13-functionalized liposomal prednisolone inhibits melanoma angiogenesis in vivo. *Journal of Liposome Research*, 20 Feb. 2024 https://doi.org/10.1080/08982104.2024.2315452 (**IF_{2022} = 4.4; AIS_{2022} = 0.511; Q2)**.

2. Giorgiana Negrea, **Valentin-Florian Rauca***, Marta Szilvia Meszaros, Laura Patras, Lavinia Luput, Emilia Licarete, Vlad-Alexandru Toma, Alina Porfire, Dana Muntean, Alina Sesarman, Manuela Banciu. Active Tumor- Targeting Nano-formulations Containing Simvastatin and Doxorubicin Inhibit Melanoma Growth and Angiogenesis. *Front. Pharmacol*., 05 April 2022 | https://doi.org/10.3389/fphar.2022.870347 (**IF_{2020} = 5.81; AIS_{2020} = 1.13; Q1**

3. **Valentin-Florian Rauca**, Laura Patras, Lavinia Luput, Emilia Licarete, Vlad-Alexandru Toma, Alina Porfire, Augustin Catalin Mot, Elena Rakosy-Tican, Alina Sesarman Manuela Banciu. Remodeling tumor microenvironment by liposomal codelivery of DMXAA and simvastatin inhibits malignant melanoma progression. *Sci Rep*. 2021 Nov 11;11(1):22102. doi: 10.1038/s41598-021-01284-5. (**IF_{2020} = 4.38; AIS_{2020} = 1.28; Q1)**

4. **Valentin-Florian Rauca,** Laurian Vlase, Tibor Casian, Alina Sesarman, Ana-Maria Gheldiu, Andrei Mocan, Manuela Banciu, Anca Toiu. Biologically active *Ajuga* species extracts modulate supportive processes for cancer cell development. *Frontiers in Pharmacology* 2019; 10:334. doi: 10.3389/fphar.2019.00334. (**IF2020 = 5.81; AIS2020 = 1.13; Q1)**

5. **Valentin-Florian Rauca**, Emilia Licarete, Lavinia Luput, Alina Sesarman, Laura Ioana Patras, Paul Bulzu, Elena Rakosy-Tican, Manuela Banciu. Combination therapy of simvastatin and 5, 6-dimethylxanthenone-4-acetic acid synergistically suppresses the aggressiveness of B16.F10 melanoma cells. *PLoS ONE* 2018 13(8):e0202827. https://doi.org/10.1371/journal.pone.0202827. **(IF2020 = 3.24; AIS2020 = 1.01; Q2)**

6. Cristina Ioana Barbălată, Alina Silvia Porfire*, Alina Sesarman, **Valentin-Florian Rauca**, Manuela Banciu, Dana Muntean, Rareș Știufiuc, Alin Moldovan, Cristian Moldovan, Ioan Tomuță. A Screening Study for the Development of Simvastatin-Doxorubicin Liposomes, a Co-Formulation with Future Perspectives in Colon Cancer Therapy. Pharmaceutics. 2021 Oct; 13(10): 1526. Published online 2021 Sep 22. doi: 10.3390/pharmaceutics13101526 **(IF2020 = 6.32; AIS$_{2020}$ = 0.90; Q1)**

7. Laura Patras, Aura Elena Ionescu, Cristian Munteanu, Renata Hajdu, Andreea Kosa, Alina Porfire, Emilia Licarete, **Valentin Florian Rauca**, Alina Sesarman, Lavinia Luput, Paul Bulzu, Paul Chiroi, Rares Andrei Tranca, Marta-Szilvia Meszaros, Giorgiana Negrea, Lucian Barbu-Tudoran, Monica Potara, Stefan Szedlacsek, Manuela Banciu. Trojan horse treatment based on PEG-coated extracellular vesicles to deliver doxorubicin to melanoma in vitro and in vivo. *Cancer Biol Ther*. 2022 Dec 31;23(1):1-16. doi: 10.1080/15384047.2021.2003656. Epub 2021 Dec 29 **(IF2020 = 4.74; AIS$_{2020}$ = 0.80; Q2)**

8. Emilia Licărete, **Valentin-Florian Rauca**, Lavinia Lupuț, Denise Minerva Drotar, Ioana Stejerean, Laura Pătraș, Bogdan Dume, Vlad Alexandru Toma, Alina Porfire, Gherman Claudia, Alina Sesărman, Manuela Banciu. Overcoming intrinsic doxorubicin resistance in melanoma by anti-angiogenic and anti-metastatic effects of liposomal prednisolone phosphate on tumor microenvironment. *International Journal of Molecular Sciences*, 2020; doi: 10.3390/ijms21082968 **(IF2020 = 5.92; AIS$_{2020}$ = 1.12; Q1)**

9. Alina Sesărman, Dana Muntean, Bianca Abrudan, Lucia Tefas, Bianca Sylvester, Emilia Licărete, **Valentin- Florian Rauca**, Lavinia Lupuț, Laura Pătraș, Manuela Banciu, Laurian Vlase, Alina Porfire, Improved pharmacokinetics and reduced side effects of doxorubicin therapy by liposomal co-encapsulation with curcumin, *Journal of Liposome Research*, 2019; 12:1-10. doi: 10.1080/08982104.2019.1682604 **(IF2020 = 3.64; AIS$_{2020}$ = 0.48; Q2)**

10. Emilia Licărete, **Valentin Florian Rauca**, Lavinia Lupuț, Laura Pătraș, Alina Sesărman, Manuela Banciu. The prednisolone phosphate-induced suppression of the angiogenic function of tumor-associated macrophages enhances the antitumor effects of doxorubicin on B16.F10 murine melanoma cells in vitro, *Oncology Reports*, 2019; 42(6):2694-2705, doi: 10.3892/or.2019.7346 **(IF_{2020} = 3.90; AIS_{2020} = 0.67; Q3)**

11. Alina Sesarman, Lucia Tefas, Bianca Sylvester, Emilia Licarete, **Valentin-Florian Rauca**, Lavinia Luput, Laura Patras, Manuela Banciu, Alina Porfire. Anti-angiogenic and anti-inflammatory effects of long-circulating liposomes co-encapsulating curcumin and doxorubicin on C26 murine colon cancer cells. *Pharmacol Rep* 2017; 70(2): 331-339 (**IF_{2020} = 3.02; AIS_{2020} = 0.61; Q3**)

D. Lucrări publicate în ultimii 10 anii în reviste şi volume de conferinţe cu referenţi (neindexate)

- Reviste

1.

- Selecţie cu maximum 20 lucrări în volume de conferinţe

1. Valentin Florian Rauca, Laura Pătraș, Giorgiana Negrea, Emilia Licărete, Alina Porfire, Lucian Barbu, Lavinia Luput, Alina Sesărman and Manuela Banciu. The use of functionalized liposomes and extracellular vesicles as drug delivery systems with high cancer-targeting efficacy. **The Annual International Conference of the Romanian Society for Biochemistry and Molecular Biology (RSBMB)**, 13th – 15th September 2023, Cluj-Napoca, România. Book of abstracts: Biologia, Vol. 68 No. 2 (2023). **(Oral presentation)**

2. **Valentin-Florian Rauca**, Emilia Licărete, Alina Sesărman, Lavinia Lupuț, Laura Pătraș, Manuela Banciu. Enhanced antitumor efficacy induced by the coadministration of simvastatin and DMXAA on an in vitro melanoma inflammation model. **The Annual International Conference of the Romanian Society for Biochemistry and Molecular Biology (RSBMB)**, 8-9 th of June 2017, Timișoara, România. Book of abstracts: New frontiers in chemistry, 26(2), p. S2_OP6 (**Oral presentation**).

3. **Valentin-Florian Rauca**, Tibor Casian, Alina Sesărman, Laurian Vlase, Ana-Maria Gheldiu, Manuela Banciu, Anca Toiu. Antitumor evaluation of extracts from selected indigenous Ajuga species on murine colon carcinoma and melanoma cell lines. **RSBMB International Conference**, 18-20th of April, 2018, Bucharest, Romania. Romanian Journal of Biochemistry, poster number 47 (**Poster presentation**).

4. **Valentin-Florian Rauca**, Laura Pătraș, Lavinia Lupuț, Alina Sesărman Emilia Licărete, Vlad Toma, Augustin
C. Moț, Manuela Banciu. Shifting the balance towards an antitumorigenic melanoma microenvironment via co- administration of liposome-encapsulated simvastatin and DMXAA in vivo. **Annual International Conference of the RSBMB**, 26-27th of September 2019, Iași, România. Book of abstracts: Journal of Experimental and Molecular Biology, Tome XX, No 3, pag 41 (**Oral Presentation**).

5. **Valentin-Florian Rauca**, Laura Pătraș, Lavinia Lupuț, Alina Sesărman, Emilia Licărete, Vlad Toma, Augustin
C. Moț, Manuela Banciu. Combination therapy of the liposome-encapsulated agents Simvastatin and DMXXA affects major mechanisms of murine melanoma development and progression. **The 24th World Congress on Advances in Oncology and 24th International Symposium on Molecular Medicine**, 10-12th of October, 2019, Mystras, Sparta, Greece. Book of abstracts: Journal of Molecular Medicine, volume 44, supplement 1, 219, 2019 (**Oral Presentation**).

6. Lavinia Lupuț, Emilia Licărete, Denise Minerva Drotar, Andras-Laszlo Nagy, Alina Sesărman, Laura Pătraș, **Valentin Florian Rauca**, Alina Porfire, Dana Muntean, Marcela Achim, Ioan Tomuță, Laurian Vlase, Manuela Banciu. Efficacy of the liposomal simvastatin in the colon carcinoma treatment approach. **The Annual International Conference of the RSBMB**, 8-9 th of June 2017, Timișoara, România. Book of abstracts: New frontiers in chemistry, 26(2), p. S2_OP7 (**Oral presentation**).

7. Emilia Licărete, **Valentin-Florian Rauca**, Alina Sesărman, Laura Pătraș, Lavinia Lupuț, Manuela Banciu. A novel combination therapy for the treatment of melanoma by targeting tumor cell proliferation and angiogenesis. **The Annual International Conference of the RSBMB**, 8-9 th of June 2017, Timișoara, România. Book of abstracts: New frontiers in chemistry, 26(2), p. S2_OP5 (**Oral presentation**).

8. Lucia Tefas, Alina Sesărman, Bianca Sylvester, Emilia Licărete, **Valentin Rauca**, Lavinia Lupuț, Laura Pătraș, Manuela Banciu, Alina Porfire. Long-circulating liposomes co-encapsulating doxorubicin and curcumin for increased efficiency of colon cancer therapy. 2017 **Pharmaceutical Sciences World Congress**, 21-24th of May, 2017, Stockholm, Sweden, International Pharmaceutical Federation, p.1 (**Poster presentation**).

9. Lucia Tefas, Alina Sesărman, Bianca Sylvester, Sebastian Porav, Emilia Licărete, **Valentin Rauca**, Lavinia Lupuț, Laura Pătraș, Manuela Banciu, Alina Porfire. Liposomal co-encapsulation of DOX and CURC: a nanotechnological approach to increase antitumor activity against colon cancer. **Sixth World Conference on physico-chemical methods in drug discovery and development and third World Conference on ADMET and DMPK**. 4-7 th of September, 2017, Zagreb, Croatia. Book of Abstracts, pag 80 (**Poster presentation**).

10. Lavinia Lupuț, Emilia Licărete, **Valentin-Florian Rauca**, Alina Sesărman, Laura Pătraș, Tibor Casian, Denise Minerva Drotar, Alina Porfire, Dana Muntean, Marcela Achim, Ioan Tomuță, Laurian Vlase, Manuela Banciu. Antitumor effects of combined therapy based on the administration of liposomal 5-fluorouracil and liposomal simvastatin on C26 colon carcinoma in vivo. **RSBMB International Conference**, 18-20th of April, 2018, Bucharest, Romania. Romanian Journal of Biochemistry, poster number 32 (**Poster presentation**).

11. Emilia Licărete, Denise Minerva Drotar, Ioana Stejerean, Laura Pătraș, **Valentin-Florian Rauca**, Lavinia Lupuț, Alina Sesărman, Manuela Banciu. A novel combination therapy for the treatment of melanoma by co- administration of doxorubicin and prednisolone encapsulated in long-circulating liposomes in vivo. **RSBMB International Conference**, 18- 20th of April, 2018, Bucharest, Romania. Romanian Journal of Biochemistry, poster number 31 (**Poster presentation**).

12. Alina Sesărman, Lucia Tefas, Bianca Sylvester, Emilia Licărete, **Valentin Rauca**, Lavinia Lupuț, Laura Pătraș, Manuela Banciu, Alina Porfire. Passive targeting of colon cancer with curcumin and doxorubicin co- encapsulated in pegylated liposomes. **RSBMB International Conference**, 18-20th of April, 2018, Bucharest, Romania. Romanian Journal of Biochemistry, poster number 53 (**Poster presentation**).

13. Marius Alupei, Lavinia Lupuț, Emilia Licărete, Laura Pătraș, Alina Sesărman, **Valentin Florian Rauca**, Alina Porfire, Andras-Laszlo Nagy, Manuela Banciu. Long-circulating liposomal simvastatin inhibits tumor growth via targeting cancer microenvironment-mediated processes. **The 12th International Conference and Workshop on Biological Biobarriers**, 27-29th of August, 2018, Saarbrucken, Germany (Oral presentation).

14. Emilia Licarete, Denise-Minerva Drotar, Ioana Stejerean, Laura Patras, **Valentin-Florian Rauca**, Lavinia Luput, Alina Sesarman, Manuela Banciu. Targeting melanoma microenvironment with liposomal prednisolone improved the therapeutic outcome of liposomal doxorubicin. **Annual International Conference of the Romanian Society of Biochemistry and Molecular Biology**, 26-27th of September 2019, Iași, România. Book of abstracts: Journal of Experimental and Molecular Biology, Tome XX, No 3, pag 20 (**Oral Presentation**).

15. Laura Pătraș, Alina Sesărman, Alina Porfire, **Valentin Florian Rauca**, Renata Hajdu, Andreea Kosa, Lavinia Lupuț, Emilia Licărete, Manuela Banciu. Dual role of cancer-derived extracellular vesicles in the modulation of tumor microenvironment. **Annual International Conference of the RSBMB**, 26-27th of September 2019, Iași, România. Book of abstracts: Journal of Experimental and Molecular Biology, Tome XX, No 3, pag 21 (**Oral Presentation**).

16. Alina Sesarman, Lucia Tefas, Bianca Sylvester, Emilia Licarete, **Valentin Rauca**, Lavinia Luput, Laura Patras, Sebastian Porav, Manuela Banciu, Alina Porfire. Manipulating the immune phenotype of tumor microenvironment with liposomal curcumin and doxorubicin. **Annual International Conference of the Romanian Society of Biochemistry and Molecular Biology**, 26-27th of September 2019, Iași, România. Book of abstracts: Journal of Experimental and Molecular Biology, Tome XX, No 3, page 58 (**Poster presentation**).

17. Alina Sesărman, Lucia Tefas, Bianca Sylvester, Emilia Licărete, **Valentin Rauca**, Lavinia Lupuț, Laura Pătraș, Sebastian Porav, Manuela Banciu, Alina Porfire. Co-encapsulation of curcumin and doxorubicin in long circulating liposomes enhances the efficacy of colon cancer treatment. **The 24th World Congress on Advances in Oncology, and 24th International Symposium on Molecular Medicine,** 10-12th of October, 2019, Mystras, Sparta, Greece. Book of abstracts: International Journal of Molecular Medicine, volume 44, supplement 1, 219, 2019) (**Oral Presentation**).

18. Emilia Licărete, Denise Minerva Drotar, Ioana Stejerean, Laura Pătraș, **Valentin-Florian Rauca**, Lavinia Lupuț, Alina Sesărman, Manuela Banciu. Modulation of tumor microenvironment by liposomal prednisolone enhances the antitumor activity of liposomal doxorubicin in an in vivo model of murine melanoma**. The 24th World Congress on Advances in Oncology, and 24th International Symposium on Molecular Medicine**, 10- 12th of October, 2019, Mystras, Sparta, Greece. Book of abstracts: International Journal of Molecular Medicine, volume 44, supplement 1, 219, 2019) (**Oral Presentation**).

19. **Valentin-Florian Rauca**, Caterina Iuliano, Kristine Mayer, Susanne Kaesler, Tilo Biedermann. Mast cells alter the invasive properties of melanoma cells in vitro. **The 51st Annual ESDR Meeting,** 28th of Sept-1st of Oct 2022, Amsterdam, The Netherlands.

E. Brevete obţinute în întreaga activitate

Data: **Semnătura:**

01.07.2025

A N E X A 4 . 1

Nume Prenume: **Șeulean Andreea-Angela**
Gradul didactic: Lect. univ. dr.

Instituția unde este titular: Universitatea Babeș-Bolyai

Facultatea: Business
Departamentul: Servicii de Ospitalitate

L I S T A
lucrărilor ştiinţifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

Vonțea, A.-A. (2015) *Strategii și tactici subsecvente planificării activității de fundraising din cadrul organizațiilor nonprofit*. Teză de doctorat. Academia de Studii Economice din București.

B. Cărți și capitole în cărți publicate în ultimii 10 ani

B1. Șeulean, A.-A. (2024) *Strategii și tactici subsecvente planificării activității de fundraising din cadrul organizațiilor nonprofit*. Cluj-Napoca: Presa Universitară Clujeană.

B2. Vonțea, A.-A. și Stancu, A. (2017) 'For-Profits and Non-Profits: A Research on the Collaboration's Premises during the Financial Crisis,' în A. Theofilou, G. Grigore și A. Stancu (editori) *Corporate Social Responsibility in the Post-Financial Crisis Era – CSR Conceptualisations and International Practices in Times of Uncertainty* (Palgrave Studies in Governance, Leadership and Responsibility, 2nd Volume), Cham: Springer International Publishing, pp. 243–262. ISBN (print): 978-3-319-40095-2. ISBN (online): 978-3-319-40096-9. Detalii – SpringerLink (bază de date) <https://www.palgrave.com/de/book/9783319400952#>.

B3. Roșca, M.-I., Sarău, A.-C. și **Vonțea**, **A.-A.** (2015) 'Classifying Social Causes Derived from the Communication of CSR Initiatives Online: A Theoretical and Practical Approach,' în A. Adi, G. Grigore și D. Crowther (editori) *Corporate Social Responsibility in the Digital Age* (Developments in Corporate Governance and Responsibility, 7th Volume), Bingley: Emerald Group Publishing, pp. 63–83. ISBN (print): 978-1-78441-582-2. ISBN (online): 978-1-78441-581-5. Detalii – EmeraldInsight (bază de date) <http://www.emeraldinsight.com/doi/abs/10.1108/S2043-052320150000007006>.

C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani

C1. Grigore, G., Molesworth, M., **Vonțea, A.**, Basnawi, A. H., Celep, O. și Jesudoss, S. P. (2021) *Corporate Social Responsibility in Liquid Times: The Case of Romania*. Journal of Business

Ethics 174: 763–782. WOS: 000691155800001. Detalii – SpringerLink (bază de date) <https://link.springer.com/content/pdf/10.1007/s10551-021-04926-w.pdf>.

C2. Grigore, G., Molesworth, M., **Vonțea, A.**, Basnawi, A. H. și Celep, O. (2020) *Drama and Discounting in the Relational Dynamics of Corporate Social Responsibility*. Journal of Business Ethics 174: 65–88. WOS: 000555362300003. Detalii – SpringerLink (bază de date) <https://link.springer.com/content/pdf/10.1007/s10551-020-04591-5.pdf>.

C3. Șeulean (Vonțea), A.-A. (2019) *Cause-Related Marketing under the Lens of Fundraising Methods*. Business Excellence and Management 9(2): 5–13. Detalii – Business Excellence and Management (website) <https://beman.ase.ro/no92/1.pdf>.

C4. Șeulean (Vonțea), A.-A. (2019) *The State as Interacting with the Market – A Suitable Context for the Nonprofit Sector*. Business Excellence and Management 9(1): 5–16. Detalii – Business Excellence and Management (website) <http://beman.ase.ro/no91/1.pdf>.

C5. Vonțea, A.-A. și Stancu, A. (2015) *Medical NGOs' Conduct on Formulating the Discourse about Governance*. Business Excellence and Management 5(1): 51–64. Detalii – Business Excellence and Management (website) <http://beman.ase.ro/no51/4.pdf>.

D. Lucrări publicate în ultimii 10 anii în reviste şi volume de conferinţe cu referenţi (neindexate)

- Reviste

–

- Selecţie cu maximum 20 lucrări în volume de conferinţe

D1. Șeulean, A.-A. (2024) *Approaching Certain Fundraising Methods and a Revised Theory of Planned Behavior in an Experimental Framework*, lucrare prezentată în cadrul Conferinței internaționale „3rd International Conference on Modern Trends in Business, Hospitality and Tourism" – ICMTBHT 2023, 4−6 mai 2023. Lucrarea în format extins a fost publicată în volumele letric și electronic ale conferinței „3rd International Conference on Modern Trends in Business, Hospitality and Tourism", *Sustainable Approaches and Business Challenges in Times of Crisis* (Springer Proceedings in Business and Economics), Editori: A. L Negruța și M. M. Coroș, Springer, Cham, România, pp. 247–266. Detalii – SpringerLink (bază de date) <https://link.springer.com/chapter/10.1007/978-3-031-48288-5_14>. ISBN (print): 978-3-031-48287-8. ISBN (online): 978-3-031-48288-5.

D2. Vonțea, A.-A. (2018) *Determinants of the Individuals' Willingness to Support Nonprofit Organizations – An Integrative Theoretical Perspective*, lucrare prezentată în cadrul Conferinței internaționale „International Conference on Marketing and Business Development" – MBD 2018, 14–16 iunie 2018, București, România. Lucrarea în format extins a fost publicată în volumul electronic al conferinței „International Conference on Marketing and Business Development", Vol. I, No. 2/2018, Editura ASE, București, România, pp. 84–91. Detalii – MBD (website) <http://www.mbd.ase.ro/?p=364>. ISSN: 2344–5130.

D3. Vonțea, A.-A. (2018) *Marketing Science as Approached into a Nonprofit Context*, lucrare prezentată în cadrul Conferinței internaționale „International Conference on Marketing and Business Development" – MBD 2018, 14–16 iunie 2018, București, România. Lucrarea în format extins a fost publicată în volumul electronic al conferinței „International Conference on Marketing and Business Development", Vol. I, No. 2/2018, Editura ASE, București, România, pp. 99–105. Detalii – MBD (website) <http://www.mbd.ase.ro/?p=364>. ISSN: 2344–5130.

D4. Vonțea, A.-A. (2018) *Non-Profits as Raising Funds from For-Profits: An Integrated Perspective in terms of Collaboration Relationships*, lucrare prezentată în cadrul Conferinței internaționale „The International e-Conference 'Enterprises in the Global Economy'" – EGE 2018, 4 octombrie 2018. Lucrarea în format extins a fost publicată în volumul electronic al conferinței „The International e-Conference 'Enterprises in the Global Economy'", Editori: D. P. C. Vancea și R. M. Zaharia, Filodiritto Publisher, Bologna, Italia, pp. 212–217. ISBN: 978-88-85813-31-1.

E. Brevete obţinute în întreaga activitate

–

Data:

Miercuri, 01.07.2025

Semnătura:

A N E X A 4 . 1

Nume Prenume: **TOMA VLAD-ALEXANDRU**
Gradul didactic: Șef lucrări

Instituția unde este titular: UNIVERSITATEA BABEȘ-BOLYAI

Facultatea: de BIOLOGIE ȘI GEOLOGIE
Departamentul: BIOLOGIE MOLECULARĂ ȘI BIOTEHNOLOGIE

L I S T A
lucrărilor ştiinţifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

Proteine și extracte vegetale studiate cu modele experimentale de stres oxidativ– Universitatea Babeș-Bolyai România, 2020

B. Cărţi si capitole în cărţi publicate în ultimii 10 ani

1. Toma, Vlad-Alexandru**, Modele biologice în patologia experimentală,** Ed. Presa Universitară Clujeană, ISBN 978-606-37-1483-2, 241 pag., Cluj-Napoca, 2022 (print & e-book)
http://editura.ubbcluj.ro/www/ro/ebooks/new.php?ofs=25&txt=new%20books&chk=4

C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani

1) Toma, V.A., Filip, A., Farcaş, A., Mirescu, C.Ş., Roşioru, C.L., Effect of hyoscine N-butylbromide on the skeletal muscle contraction in Wistar rat - a few physiological aspects, *Ann. Rom. Soc. Cell Biol*., **18**(2), 2013, 123-128 (http://www.annalsofrscb.ro/numar%20in%20curs/18%202/18.pdf).

2) Vlad Al. Toma, Anca D. Farcaş, Ioana Roman, Florina Scurtu-Deac, Radu Silaghi-Dumitrescu. In vivo tests of cell-free hemoglobin-based blood substitutes candidates: histopathological characterization. *Rev Romana Med Lab* - Supliment 24(1), 2016, 88-89 (http://www.rrml.ro/articole/2016/2016_1_supliment.pdf).

3) Toma, V., Farcaş, A., Roman, I., Sevastre, B., Hathazi, D., Scurtu, F., Damian, G., Silaghi-Dumitrescu, R. Comparative in vivo effects of hemoglobin-based oxygen carriers (HBOC) with varying prooxidant and physiological reactivity. *PloS ONE*, **11**(4), 2016, 1-16 (https://www.ncbi.nlm.nih.gov/pubmed/27097326).

4) Toma, VA., Farcas, A, Parvu, M., Silaghi-Dumitrescu, R., Roman, I. CA3 hippocampal field: Cellular changes and its relation with blood nitro-oxidative stress reveal a balancing function of CA3 area in rats exposed to repeated restraint stress. *Brain Res Bull*., 130, 2017, 10-17 (https://www.ncbi.nlm.nih.gov/pubmed/28013041).

5) Toma, **V. A**., Farcas, A.D., Roman, I., Sevastre, B., Hathazi, D., Scurtu, F., Damian, G., Silaghi-Dumitrescu, R., In vivo evaluation of hemerythrin-based oxygen carriers: similarities with hemoglobin-based counterparts. *Int. J. Biol.Macromol*., S0141-8130(17), 2017, 31756-7. (http://www.sciencedirect.com/science/article/pii/S0141813017317567).

6) Toma, V. A., Farcasanu, A., Sevastre-Berghian, A., Barbu-Tudoran L., Tripon, S., Sevastre , B., Farcas, A.D., Roman, I., Simon, S., Parvu, M. Behavior, MRI features and ultrastructural bases of the autism-like disorders induced in rats by prenatally exposed to sodium valproate, *Brain Disord. Ther*., 6(3 Suppl), 56, 2017 (DOI: 10.4172/2168-975X-C1-018,)

7) Toma, V.A., Dume, B.R., Farcas, A.D., Roman, I. The antioxidants are not enough. Malus sylvestris (L.) Mill. extract enhances the carbon tetrachloride liver toxicity in albino rats. *Ann. RSCB*, **22**(2), 2018, 26-33 (http://www.annalsofrscb.ro/numar%20in%20curs/22%202/vlad4_1.pdf).

8) Toma, V. A., Bucălie, E., Farcaș, A. D., Ciolpan, P., Roman, I., Mureșan, A., & Grosu, E. F. Dynamics of salivary cortisol and testosterone during competition stress in alpine skiing in adults and children. *Cognition, Brain, Behavior*, 23(1), 2019, 29-41 (https://search.proquest.com/docview/2227777974?pq-origsite=gscholar)

9) Toma, V. A., Tigu, A. B., Farcaș, A. D., Sevastre, B., Taulescu, M., Gherman, A. M. R., ... & Pârvu, M. New aspects towards a molecular understanding of the allicin immunostimulatory mechanism via Colec12, MARCO, and SCARB1 receptors. *International Journal of Molecular Sciences*, *20*(15), 2019, 3627 (https://www.mdpi.com/1422-0067/20/15/3627).

10) Farcas, A. D., **Toma, V. A**., Roman, I., Sevastre, B., Scurtu, F., & Silaghi-Dumitrescu, R. (2020). Glutaraldehyde-Polymerized Hemoglobin: In Search of Improved Performance as Oxygen Carrier in Hemorrhage Models. *Bioinorganic Chemistry and Applications*, *2020* (https://www.hindawi.com/journals/bca/2020/1096573/).
11) Dionisie, V., Ciobanu, A. M., **Toma, V. A**., Manea, M. C., Baldea, I., Olteanu, D., ... & Filip, G. A. (2021). Escitalopram targets oxidative stress, caspase-3, BDNF and MeCP2 in the hippocampus and frontal cortex of a rat model of depression induced by chronic unpredictable mild stress. *International Journal of Molecular Sciences*, *22*(14), 7483 (https://www.mdpi.com/1422-0067/22/14/7483).
12) Toma, V. A., Colnita, A., Brezestean, I., Dume, B., Roman, I., & Turcu, I. (2021). The complementary role of the RAMAN microspectroscopy to the oxidative stress assays in the neonatal synaptosomes characterization. *Studia Universitatis Babes-Bolyai, Chemia*, *66*(3).
13) Racz, L. Z., Racz, C. P., Pop, L. C., Tomoaia, G., Mocanu, A., Barbu, I., ... & **Toma, V. A**. (2022). Strategies for Improving Bioavailability, Bioactivity, and Physical-Chemical Behavior of Curcumin. *Molecules*, *27*(20), 6854 (https://www.mdpi.com/1420-3049/27/20/6854).
14) Toma, V. A., Dume, B., Trâncă, R., Sevastre, B., Barbu, L., Filip, G. A., ... & Sevastre-Berghian, A. C. (2022). The Effect of Repeated Restraint Stress on Neuroglobin-Oligodendrocytes Functions in the CA3 Hippocampal Area and Their Involvements in the Signaling Pathways of the Stress-Induced Anxiety. *Applied Sciences*, *12*(17), 8680 (https://www.mdpi.com/2076-3417/12/17/8680).
15) Lupu, M., Tudor, D. V., **Toma, V. A**., Florea, A., Lupsor, A., Moldovan, R., ... & Filip, A. G. (2022). Iron chelation effects on lipid peroxidation, inflammation and ventricular performance in a rat model of isoproterenol induced acute myocardial stress. *Journal of Physiology and Pharmacology: An Official Journal of the Polish Physiological Society*, *73*(3) (https://europepmc.org/article/med/36302532).
16) Stoica, A. D., **Toma, V. A.**, Roman, I., Sevastre, B., Scurtu, F., & Silaghi-Dumitrescu, R. (2022). Glutaraldehyde-Polymerized Hemerythrin: Evaluation of Performance as an Oxygen Carrier in Hemorrhage Models. *Bioinorganic Chemistry and Applications*, *2022* (https://www.hindawi.com/journals/bca/2022/2209101/).
17) Roman, I., Puică, C., **Toma, V.**, The effect of *Vaccinium vitis-idaea* L. extract on kidney structure and function in alcohol intoxicated rats. *Studia Universitatis "Vasile Goldiş"*, **24**(4), 2014, 363-367 (http://www.studiauniversitatis.ro/pdf/24-2014/24-4-2014/2-%20Roman%20I-%20363-367.pdf).
18) Roman, I., **Toma, V.**, Farcas, A., Protective effects of *Gallium verum* L., extract on the hypothalamic – pituitary – adrenal axis under anakinetic stress conditions, in rats. Histological aspects. *Studia Universitatis "Vasile Goldiş",* 25(3), 2015, 207-214 (http://www.studiauniversitatis.ro/pdf/25-2015/25-3-2015/10-25-3-%20I.R.-%20207-%20214.pdf).
19) Roman, I., Puica, C., **Toma, V**., The effect of *Lamium album* and *Lamium purpureum* extracts on some blood parameters under anakinetic stress conditions in Wistar rats. *Bull. Univ. Agric. Sci. Vet. Med*.. Cluj-Napoca-Veterinary Medicine, **73**(1), 2016, 18-20 (http://journals.usamvcluj.ro/index.php/veterinary/article/view/10902).
20) Sevastre-Berghian, A. C., Fagarasan, V., **Toma, V.A**., Baldea I., Olteanu, D., Moldovan, R., Decea, N., Filip, G.A., Clichici, S.V. Curcumin reverses the diazepam-induced cognitive impairment by modulation oxidative stress and ERK 1/2/NF-kB pathway in brain. *Oxid. Med. Cell. Longev*., Article ID 3037876, 1-17, 2017, 2017 (https://www.hindawi.com/journals/omcl/2017/3037876/).
21) Farcas, A.D., Mot, A.C., Zagrean-Tuza, C., **Toma, V**., Cimpoiu, C., Hosu, A., Parvu, M., Roman, I., Silaghi-Dumitrescu, R. Chemo-mapping and biochemical-modulatory and antioxidant/prooxidant effect of Galium verum extract during acute restraint and dark stress in female rats. *PloS one*, *13*(7), 2018, e0200022 (https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0200022).
22) Farcas, A.D., **Toma, V.A.,** Crisan, F., Dume, B.R., Roman, I.. The down-regulation outcome of wild European apple (Malus sylvestris (L.) Mill.) extract on a series of biochemical markers during oxidative stress. *Ann. RSCB*, **22**(2), 2018, 34-41 (http://www.annalsofrscb.ro/numar%20in%20curs/22%202/farcas5.pdf).
23) Sevastre-Berghian, A., **Toma, V.A.,** Sevastre, B., Hanganu, D., Vlase, L., Benedec, D., Oniga, I., Olteanu, D., Moldovan, R., Decea, N., Filip, G.A., Clichici, S.V. Characterization and biological effects of Hypericum extracts on experimentally-induced – anxiety, oxidative stress and inflammation in rats. *J. Physiol. Pharmacol*, 69(5), 2018 (http://www.jpp.krakow.pl/journal/archive/10_18/pdf/10.26402/jpp.2018.5.13.pdf).
24) Opris, R., **Toma, V.,** Olteanu, D., Baldea, I., Baciu, A. M., Lucaci, F. I., ... & David, L. Effects of silver nanoparticles functionalized with Cornus mas L. extract on architecture and apoptosis in rat testicle. *Nanomedicine*, 2019 (ahead of print) (https://doi.org/10.2217/nnm-2018-0193).
25) Farcaș, A. D., Moț, A. C., Pârvu, A. E., **Toma, V. A.,** Popa, M. A., Mihai, M. C., …& Pârvu, M. (2019). In vivo pharmacological and anti-inflammatory evaluation of xerophyte Plantago sempervirens Crantz. *Oxidative Medicine and Cellular Longevity*, 2019, *2019* (https://www.hindawi.com/journals/omcl/2019/5049643/abs/).
26) Laszló, I. P., Laszló, M. R., **Toma, V**., Baldea, I., Olteanu, D., David, L., ... & Kacso, G. The in vivo modulatory effects of Cornus mas extract on photodynamic therapy in experimental tumors. *Photodiagnosis and Photodynamic Therapy*, 101656 (https://www.sciencedirect.com/science/article/abs/pii/S1572100020300089).

27) Luput, L., Sesarman, A., Porfire, A., Achim, M., Muntean, D., Casian, T., Pătraș, L., Rauca, V.F., Drotar, D.M., Stejerean, I., Tomuta, I., Vlase, L., Dragoș, N., **Toma, V.A.,** Licărete, E., Banciu, M.Liposomal simvastatin sensitizes C26 murine colon carcinoma to the antitumor effects of liposomal 5-fluorouracil in vivo. *Cancer science*, 2020 (https://onlinelibrary.wiley.com/doi/abs/10.1111/cas.14312).

28) Țigu, A. B., **Toma, V. A.,** Moț, A. C., Jurj, A., Moldovan, C. S., Fischer-Fodor, E., Berindan-Neagoe, I., Pârvu, M. (2020). The Synergistic Antitumor Effect of 5-Fluorouracil Combined with Allicin against Lung and Colorectal Carcinoma Cells. *Molecules*, *25*(8), 1947 (https://www.mdpi.com/1420-3049/25/8/1947/htm).

29) Licarete, E., Rauca, V. F., Luput, L., Drotar, D., Stejerean, I., Patras, L., Dume, B., **Toma, V.A.,** Porfire, A., Gherman, C., Sesarman, A., Banciu, M. (2020). Overcoming Intrinsic Doxorubicin Resistance in Melanoma by Anti-Angiogenic and Anti-Metastatic Effects of Liposomal Prednisolone Phosphate on Tumor Microenvironment. *International Journal of Molecular Sciences*, *21*(8), 2968 (https://www.mdpi.com/1422-0067/21/8/2968).

30) Berghian-Sevastre, A. C., Ielciu, I., Mitre, A. O., Filip, G. A., Oniga, I., Vlase, L., Daniela Benedec, Ana-Maria Gheldiu, **V.A. Toma**, B. Mihart, A. Mihut, I. Baldea, D. Olteanu, I.C. Chis, S.V. Clichici, D. Hanganu (2020). Targeting oxidative stress reduction and inhibition of HDAC1, MECP2 and NF-kB pathways in experimental-induced hyperglycaemia in rats by administration of Thymus marshallianus Willd. extracts. *Frontiers in Pharmacology*, *11*, 1492 (https://www.frontiersin.org/articles/10.3389/fphar.2020.581470/full).

31) Bonea, M., Filip, G. A., **Toma, V. A**., Baldea, I., Berghian, A. S., Decea, N., ... & Micluția, I. V. (2020). The Modulatory Effect of Metformin on Ethanol-Induced Anxiety, Redox Imbalance, and Extracellular Matrix Levels in the Brains of Wistar Rats. *Journal of Molecular Neuroscience*, 1-19 (https://link.springer.com/article/10.1007/s12031-020-01593-w).

32) Silaghi-Dumitrescu, R., Gruian, C., Puscas, C., Simon, A., Fisher-Fodor, E., **Toma, V. A.,** ... & Damian, G. (2020). Spin labelled hemoglobin-based oxygen carriers (HBOC): preparation and evaluation of in vivo/in vitro stability. *Studia Universitatis Babes-Bolyai, Chemia*, *65*(2) (http://chem.ubbcluj.ro/~studiachemia/chemia2020_2.html).

33) Epure, A., Pârvu, A. E., Vlase, L., Benedec, D., Hanganu, D., Gheldiu, A. M., **Toma, V.A.** & Oniga, I. (2021). Phytochemical Profile, Antioxidant, Cardioprotective and Nephroprotective Activity of Romanian Chicory Extract. *Plants*, *10*(1), 64 (https://www.mdpi.com/2223-7747/10/1/64).

34) Țigu, A. B., Moldovan, C. S., **Toma, V. A.,** Farcaș, A. D., Moț, A. C., Jurj, A., ... & Pârvu, M. (2021). Phytochemical analysis and in vitro effects of Allium fistulosum L. and Allium sativum L. extracts on human normal and tumor cell lines: a comparative study. *Molecules*, *26*(3), 574 (https://www.mdpi.com/1420-3049/26/3/574).

35) Pop, N. L., Nan, A., Urda-Cimpean, A. E., Florea, A., **Toma, V. A.,** Moldovan, R., ... & Orasan, R. (2021). Chitosan Functionalized Magnetic Nanoparticles to Provide Neural Regeneration and Recovery after Experimental Model Induced Peripheral Nerve Injury. *Biomolecules*, *11*(5), 676 (https://www.mdpi.com/2218-273X/11/5/676).

36) Rauca, V. F., Patras, L., Luput, L., Licarete, E., **Toma, V. A.,** Porfire, A., ... & Banciu, M. (2021). Remodeling tumor microenvironment by liposomal co-delivery of DMXAA and simvastatin inhibits malignant melanoma progression. *BioRxiv* (https://www.biorxiv.org/content/10.1101/2021.04.26.441259v1.abstract).

37) Cenariu, D., Fischer-Fodor, E., Țigu, A. B., Bunea, A., Virág, P., Perde-Schrepler, M., ... & Maniu, A. (2021). Zeaxanthin-Rich Extract from Superfood Lycium barbarum Selectively Modulates the Cellular Adhesion and MAPK Signaling in Melanoma versus Normal Skin Cells In Vitro. *Molecules*, *26*(2), 333 (https://www.mdpi.com/1420-3049/26/2/333).

38) Rauca, V. F., Patras, L., Luput, L., Licarete, E., **Toma, V.** A., Porfire, A., ... & Banciu, M. (2021). Remodeling tumor microenvironment by liposomal codelivery of DMXAA and simvastatin inhibits malignant melanoma progression. *Scientific reports*, *11*(1), 1-15 (https://www.nature.com/articles/s41598-021-01284-5).

39) Sevastre-Berghian, A. C., **Toma, V. A.,** Sevastre, B., Benedec, D., Oniga, I., Filip, L., ... & Hanganu, D. (2021). Hypericum sp. extracts improve anxiety-like behaviour and influence cerebral HMOX1 expression in a rat model of FG-7142-induced anxiety. *Farmacia*, *69*(6), 1080-1088 (https://farmaciajournal.com/wp-content/uploads/art-09-Sevastre-Berghian_Filip_Hanganu_1080-1088.pdf).

40) Marc, G., Stana, A., Franchini, A. H., Vodnar, D. C., Barta, G., Tertiș, M., **Toma, V.A.,** ... & Oniga, O. (2021). Phenolic thiazoles with antioxidant and antiradical activity. Synthesis, in vitro evaluation, toxicity, electrochemical behavior, quantum studies and antimicrobial screening. *Antioxidants*, *10*(11), 1707 (https://www.mdpi.com/2076-3921/10/11/1707).

41) Negrea, G., Rauca, V. F., Pătraș, L., Luput, L., Licărete, E., **Toma, V. A**., ... & Sesărman, A. (2021). Novel combined therapy based on IL-13-PEG-LCL-SIM and PEG-EV-DOX to reduce murine melanoma aggresiveness in vivo. *Studia Universitatis Babes-Bolyai, Biologia*, *66*(1).

42) Pop, N. L., Mitrea, D. R., Urdă-Cîmpean, A. E., Glossa-Athanasoula, A., **Toma, V. A.,** Moldovan, R., ... & Orăsan, R. (2021). Chitosan oral administration stimulates regeneration after experimentally induced peripheral nerve injury. *Palestrica of the Third Millennium Civilization & Sport*, *22*(2) (https://jhsrm.org/magazine/010/HSRM%20(PM3)_Nr.2(84)_2021m.pdf#page=4).

43) Opris, R. V., **Toma, V.,** Baciu, A. M., Moldovan, R., Dume, B., Berghian-Sevastre, A., ... & Florea, A. (2022). Neurobehavioral and ultrastructural changes induced by phytosynthesized silver-nanoparticle toxicity in an in vivo rat model. *Nanomaterials*, *12*(1), 58 (https://www.mdpi.com/2079-4991/12/1/58).
44) Negrea, G., Rauca, V. F., Meszaros, M. S., Patras, L., Luput, L., Licarete, E., ... & Banciu, M. (2022). Active tumor-targeting nano-formulations containing simvastatin and doxorubicin inhibit melanoma growth and angiogenesis. *Front. Pharmacol*. 13: 870347. doi: 10.3389/fphar. 2022.870347.
45) Laszló, I. P., Laszló, M. R., Popescu, T., **Toma, V**., Ion, R. M., Moldovan, R., ... & Muresan, A. (2022). The comparative effects of resveratrol and curcumin in combination with photodynamic therapy. *Medicine and Pharmacy Reports*, *95*(2), 165-178 (https://medpharmareports.com/index.php/mpr/article/view/2497/2900).
46) Stoica, A. D., Sevastre, B., Suciu, M., Pârvu, A. E., Pârvu, M., **Toma, V. A**., ... & Dobre, C. (2023). Chemoprotective Effect of Plantago sempervirens Crantz Extract on Ovarian Structure and Folliculogenesis. *Applied Sciences*, *13*(5), 3134 (https://www.mdpi.com/2076-3417/13/5/3134).
47) Lupu, M., Coada, C. A., Tudor, D. V., Baldea, I., Florea, A., **Toma, V. A.,** ... & Filip, G. A. (2023). Iron chelation alleviates multiple pathophysiological pathways in a rat model of cardiac pressure overload. *Free Radical Biology and Medicine* (https://pubmed.ncbi.nlm.nih.gov/36822542/).
48) Colniță, A., Toma, V. A., Brezeștean, I. A., Tahir, M. A., & Dina, N. E. (2023). A Review on Integrated ZnO- Based SERS Biosensors and Their Potential in Detecting Biomarkers of Neurodegenerative Diseases. Biosensors, 13(5), 499.
49) Marc, G., Stana, A., Tertiș, M., Cristea, C., Ciorîță, A., Drăgan, Ș. M., ... & Oniga, O. (2023). Discovery of New Hydrazone-Thiazole Polyphenolic Antioxidants through Computer-Aided Design and In Vitro Experimental Validation. International Journal of Molecular Sciences, 24(17), 13277.
50) Nenu, I., Baldea, I., Coadă, C. A., Craciun, R. C., Moldovan, R., Tudor, D., ... & Filip, G. A. (2023). Lactobacillus rhamnosus probiotic treatment modulates gut and liver inflammatory pathways in a hepatocellular carcinoma murine model. A preliminary study. Food and Chemical Toxicology, 114314.
51) Vlase, A.-M.; Toiu, A.; Gligor, O.; Muntean, D.; Casian, T.; Vlase, L.; Filip, A.; Bâldea, I.; Clichici, S.; Decea, N.; et al. Investigation of Epilobium hirsutum L. Optimized Extract's Anti-Inflammatory and Antitumor Potential. Plants 2024, 13, 198. https://doi.org/10.3390/plants13020198
52) Sesarman, A., Luput, L., Rauca, V. F., Patras, L., Licarete, E., Meszaros, M. S., ... & Banciu, M. (2024). Targeting of M2 macrophages with IL-13-functionalized liposomal prednisolone inhibits melanoma angiogenesis in vivo. Journal of Liposome Research, 1-12.
53) Vulcan, T., Suciu, T. S., Lenghel, L. M., Toma, V. A., Decea, N., Moldovan, R., ... & Filip, G. A. (2024). The impact of vitamin D3 administration and of high fat diet on oxidative stress and inflammation in experimentally induced polycystic ovary syndrome. Medicine and Pharmacy Reports, 97(4), 516.
54) Colniță, A., Marconi, D., Toma, V. A., Brezeștean, I. A., Suciu, M., Ciorîță, A., & Dina, N. E. (2024). SERS detection of dopamine in artificial cerebrospinal fluid and in Parkinson's disease-induced mouse cortex using a hybrid ZnO@ Ag nanostructured platform. Microchemical Journal, 206, 11.
55) Florea, C. M., Rosu, R., Moldovan, R., Vlase, L., Toma, V., Decea, N., ... & Filip, G. A. (2024). The impact of chronic Trimethylamine N-oxide administration on liver oxidative stress, inflammation, and fibrosis. Food and Chemical Toxicology, 114429.
56) Barbu, I. A., Toma, V. A., Moț, A. C., Vlase, A. M., Butiuc-Keul, A., & Pârvu, M. (2024). Chemical composition and antioxidant activity of six Allium extracts using protein-based biomimetic methods. Antioxidants, 13(10), 1182.
57) Roman, I., Moldoveanu, C. A., Drăgan, Ș., Baumli, J., Cimpoiu, C., & Toma, V. A. (2024). Neurotrophic effects of iridoid glycosides from Lamium album L. as natural GLP1-R modulators in repeated restraint stress. Studia Universitatis Babes-Bolyai, Chemia, 69(3).

D. Lucrări publicate în ultimii 10 anii în reviste şi volume de conferinţe cu referenţi (neindexate)

1) Biological models of autism spectrum disorders: valproate, oxidative stress and development, Conferinţa Interdisciplinară a Doctoranzilor UBB, Baru, iunie, 2016.
2) Cellular and biochemical coordinates related to CA3 hippocampal field in repeated restraint stress, Conferinţa Naţională Societăţii Române de Biologie Celulară, Oradea, iunie, 2016.
3) Brain Electrophysiological Features of Autism-Spectrum Disorders (ASD): Experimental and Clinical Aspects Related to Valproic Acid Therapy, Conferinţa Naţională de Biofizică, iunie, 2016.
4) Coordinates of genetics of autism spectrum disorders. A review studies of the ASD-related genes in humans and lab animals, Conferinţa Internaţională a Studenţilor Psihologi, mai, 2016.
5) Valproic acid-induced autism spectrum disorders symptoms: theoretical, clinical and experimental coordinates, Neuroscience 2016 Virtual Conference, CA-USA, Section: Neuron Biology, martie, 2016.
Hemoglobin based blood substitutes behavior in hemorrhagic conditions, Conferinţa Naţională a Societăţii Române de Biologie

Celulară, Baia-Mare, iunie, 2015.
6) ”Artificial Blood”- Newly developed blood substitutes tested on laboratory animals and cell cultures. Preliminary results, Conferinţa Internaţională a Societăţii Române de Biologie Celulară, Târgu-Mureș România, iunie, 2014.

Data: **Semnătura:**

01.07.2025 Lector dr. Vlad-Alexandru TOMA

A N E X A 4 . 1

Nume Prenume: **Vlad Miranda Petronella**
Gradul didactic: Conferențiar universitar
Instituția unde este titular: Universitatea Babeș-Bolyai
Facultatea: Biologie și Geologie
Departamentul: Biologie moleculară și Biotehnologie

L I S T A
lucrărilor ştiinţifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

Vlad Miranda Petronella, *Contribuţii la conceperea, proiectarea şi realizarea unui sistem de instruire la distanţă în domeniul economic***,** susţinută în cadrul Facultăţii de Ştiinţe Economice şi Gestiune a Afacerilor, Universitatea ”Babeş Bolyai” din Cluj-Napoca, Diplomă de doctor seria F, nr.0009299, Ord. Ministru nr.5837/04.11.2008.

B. Cărţi si capitole în cărţi publicate în ultimii 10 ani

1 Danciu Radu (coordonator), **VLAD Miranda Petronella** ş.a., *Cunoştinţe economice fundamentale şi de specialitate pentru examenul de licenţă – ediţia a VII-a revizuită, modificată şi adăugită. Domeniul: Contabilitate, Programul de studii: Contabilitate şi informatică de gestiune*, Editura Risoprint, Cluj-Napoca, 2019.

2 Danciu Radu (coordonator), **VLAD Miranda Petronella** ş.a., *Cunoştinţe economice fundamentale şi de specialitate pentru examenul de licenţă 2017-2018, Domeniul: Contabilitate, Programul de studii: Contabilitate şi informatică de gestiune,* Editura Risoprint, Cluj-Napoca, 2018.

3 Danciu Radu (coordonator), **VLAD Miranda Petronella** ş.a., *Cunoştinţe economice fundamentale şi de specialitate pentru examenul de licenţă 2016-2017, Domeniul: Contabilitate, Programul de studii: Contabilitate şi informatică de gestiune,* Editura Risoprint, Cluj-Napoca, 2017.

4 Danciu Radu (coordonator), **VLAD Miranda Petronella** ş.a., *Cunoştinţe economice fundamentale şi de specialitate pentru examenul de licenţă 2015-2016, Domeniul: Contabilitate, Programul de studii: Contabilitate şi informatică de gestiune,* Editura Risoprint, Cluj-Napoca, 2016.

5 Danciu Radu (coordonator), **VLAD Miranda Petronella** ş.a., *Cunoştinţe economice fundamentale şi de specialitate pentru examenul de licenţă 2014-2015, Domeniul: Contabilitate, Programul de studii: Contabilitate şi informatică de gestiune,* Editura Risoprint, Cluj-Napoca, 2015, pag. 141, 151-155, ISBN 978-973-53-1482-8.

6 Danciu Radu (coordonator), **VLAD Miranda Petronella** ş.a., *Cunoştinţe economice fundamentale şi de specialitate pentru examenul de licenţă 2013-2014, -ediţia a II-a-, Revizuită, modificată şi adăugită, Domeniul: Contabilitate, Programul de studii: Contabilitate şi informatică de gestiune,* Editura Risoprint, Cluj-Napoca, 2014, pag. 206-231, ISBN 978-973-53-1201-5.

C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani

1 Mocean Loredana, Vlad Miranda-Petronella, **DIGITAL SIGNATURE: LEGAL RECOGNITION, SECURITY CHALLENGES, AND OPTIMIZATION TECHNIQUES,** The 24th International Conference on Informatics in Economy (IE 2025) Recent Results in Education, Research, and Applications in the AI Era, https://www.conferenceie.ase.ro/wp-content/uploads/2025/05/Program-IE-2025-final_v3.pdf

2 Mocean Loredana, Vlad Miranda-Petronella, ARTIFICIAL INTELLIGENCE AND THE NEW CHALLENGES, Fiat Justitia, No 1. (2024), ISSN 2810-5524, ISSN -L- 1224-4015 https://fiatiustitia.ro/wp-content/uploads/2025/06/Fiat-1-din-2024-10.06.2025-41-51.pdf

3 Mocean Loredana, Vlad Miranda-Petronella, THE USE OF GENERATIVE TECHNOLOGIES IN E-EDUCATION, QUAESTUS, NO. 24/ June 2024, ISSN 2285 – 424X, ISSN-L 2285 – 424X, ISSN online 2343-8134 https://www.quaestus.ro/wp-content/uploads/2013/09/Quaestus.24.Contents.pdf

4 Mocean Loredana, Vlad Miranda-Petronella, SECURITY ONTOLOGY IN A VIRTUAL UNIVERSITY, PU B L I S H E R "NICOLAE BĂLCESCU" LAND FORCES ACADEMY Sibiu 2024, ISSN 2247-8396, ISSN-L = 1224-5178, Scientific Bulletin, https://www.armyacademy.ro/reviste/rev2_2024/Table_of_contents_RAFT_2_2024.pdf

5 Mocean Loredana, Vlad Miranda-Petronella, DATABASE SECURITY IN RDF TERMS, PU B L I S H E R "NICOLAE BĂLCESCU" LAND FORCES ACADEMY Sibiu 2023, ISSN 2247-8396, ISSN-L = 1224-5178, Scientific Bulletin, Vol. XXVIII, Issue 1(55)/2023, https://www.armyacademy.ro/engleza/buletin.php

6 Mocean Loredana, Vlad Miranda-Petronella, CYBERSECURITY IN THE POST COVID ERA, Fiat Justitia, No 2. (2022). ISSN 2810-5524, ISSN -L- 1224-4015 https://fiatiustitia.ro/wp-content/uploads/2023/04/FIAT-Iustitia-nr.-2-2022-24.04.2023-26-36.pdf

7 Mocean Loredana, Vlad Miranda-Petronella, 2022,METHODS OF STATIC PROTECTION OF WORD DOCUMENTS, Buletin Stiintific Volumul XXVII Issue 2, p131-141, Editura ACADEMIEI FORŢELOR TERESTRE „NICOLAE BĂLCESCU" SIBIU, ISSN 2247-8396, ISSN-L = 1224-5178, Scientific Bulletin is indexed in several International Databases, https://www.armyacademy.ro/engleza/buletin.php

8 Mocean Loredana, Vlad Miranda-Petronella, A MODEL OF DATABASE PLATFORM FOR E-COMMERCE APPLICATIONS IN E-SOCIETY, The 19 th International Conference on Informatics in Economy (IE 2020) Education, Research & Business Technologies, All accepted papers of the conference will be published in Proceeding of the 19th International Conference on Informatics in Economy, (ISSN: 2247–1480), Education, Research & Business Technologies.The conference volume will be indexed in RePEC and will be sent for evaluation to ISI Thomson Reuters, http://www.conferenceie.ase.ro/wp-content/uploads/2020/05/Program-IE-2020.pdf

9 Apan, Rodica Diana and Vlad, Miranda Petronella, 2016, Juridical perspectives on the increase of share capital of companies regulated by Law no. 31 of 1990; the entries registered within the

trade registry regarding the increase of foreign participation in the share capital, JURIDICAL TRIBUNE-TRIBUNA JURIDICA
https://tribunajuridica.eu/arhiva/An6v2/2%20Apan.pdf
https://www.webofscience.com/wos/woscc/summary/a7df1744-40ae-4010-a67e-bbe26d3e516f-f9076343/relevance/1

10 Farahani M.R., Vlad M.P., 2015, *Some connectivity indices of capra-designed planar benzenoid series Can(C6)*, Studia Universitatis Babes-Bolyai Chemia, 60 (2), pp. 251 - 258, Cited 4 times.
http://studia.ubbcluj.ro/download/pdf/932.pdf
https://www.scopus.com/inward/record.uri?eid=2-s2.0-84938323835&partnerID=40&md5=cfb8acd44829a479f88026cb62ce491d

11 Vlad, Miranda Petronella and Tirlea, Mariana Rodica, 2015, Aspects on the importance of electronic processing of information in calculating the profit tax, 21st International Conference The Knowledge-Based Organization
https://www.webofscience.com/wos/woscc/summary/a7df1744-40ae-4010-a67e-bbe26d3e516f-f9076343/relevance/1

12 Mocean, Loredana ; Vlad, Miranda ; Avornicului, Mihai, 2015, RECOMMENDER SYSTEMS, A USEFUL TOOL FOR VIRTUAL MARKETPLACE; CASE STUDY, INTERNATIONAL CONFERENCE ON INFORMATICS IN ECONOMY
https://www.webofscience.com/wos/woscc/full-record/WOS:000362796900032

13 VLAD Miranda Petronella, Ţirlea Mariana Rodica, BDI, *Aspects on the Importance of Electronic Processing of Information in Calculating thr Profit Tax*, The 21th International Conference, The Knowledge-Based Organization, KBO 2015, CONFERENCE PROCEEDINGS 2 Economic, Social and Administrative Approaches To The Knowledge-Based Organization, "Nicolae Bălcescu" Land Forces Academy Publishing House, Sibiu, 11-13 June 2015, pp. 94-98, ISSN 1843-6722,
www.armyacademy.ro

14 VLAD Miranda Petronella, Ţirlea Mariana Rodica, BDI, *Role and the Importance of the Card in the Business Environment*, Yearbook of the "George Barițiu" Institute of History in Cluj-Napoca, XII, Series Humanistica, 2014, The Publishing House of the Romanian Academy, Bucureşti, 2014, pp. 337-344, ISSN 1584-4404,
www.history-cluj.ro

15 Farahani M.R., Vlad M.P., 2014, *Omega polynomial of a benzenoid system*, Studia Universitatis Babes-Bolyai Chemia, 59 (2), pp. 71 - 78, Cited 3 times.
http://www.studia.ubbcluj.ro/arhiva/abstract_en.php?editie=CHEMIA&nr=2&an=2014&id_art=12575
https://www.scopus.com/inward/record.uri?eid=2-s2.0-84904001105&partnerID=40&md5=f2e2474636f0b2640b8d9803bd5ed431

16 VLAD Miranda Petronella, Diudea Mircea, BDI, Älexandru Ioan Cuza"University Days, Faculty of Chemistry Conference & Mini-Hot-Conference: „*Recent Achievements in Organic and Supramolecular Chemistry"*, Analele ştiinţifice ale Universităţii "Alexandru Ioan Cuza" din Iaşi , ACTA CHEMICA Iași, vol.21No.2 2013, VERSITA Doi:10.2478/ACHI-2013-0009 October 31st-November 02nd 2013, Iaşi, pp.83-92, ISSN 2067-2438, ISSN (online) 2067-2446,
http://www.chem.uaic.ro/ro/acta-chemica/acta_chemica.html

17 Farahani Mohammad Reza, VLAD Miranda Petronella, 2013, COMPUTING FIRST AND SECOND ZAGREB INDEX, FIRST AND SECOND ZAGREB POLYNOMIAL OF CAPRA-DESIGNED PLANAR BENZENOID SERIES $Ca_n(C_6)$

18 Farahani, Mohammad Reza and Vlad, Miranda Petronella, STUDIA UNIVERSITATIS BABES-BOLYAI CHEMIA, LVIII, Cluj-Napoca, 2013, 2/2013, Cluj University Press, pp. 133-142, ISSN: 1224-7154,
www.studia.ubbcluj.ro

https://www.webofscience.com/wos/woscc/full-record/WOS:000332273100013

19 Farahani M.R., Vlad M.P., 2013, *Computing first and second Zagreb index, first and second Zagreb polynomial of capradesigned planar benzenoid series Can(C6),* Studia Universitatis Babes-Bolyai Chemia, 2013 (2), pp. 133 - 142, Cited 15 times.
http://studia.ubbcluj.ro/download/pdf/800.pdf
https://www.scopus.com/inward/record.uri?eid=2-s2.0-84880803227&partnerID=40&md5=7794c58d881116cb99707d5be66609fd

20 Farahani M.R., Kollo K., Vlad M.P., 2013, *Second-connectivity index of Capra-designed planar benzenoid series Can(C6),* Studia Universitatis Babes-Bolyai Chemia, 2013 (2), pp. 127 - 132, Cited 2 times.
http://studia.ubbcluj.ro/download/pdf/800.pdf
https://www.scopus.com/inward/record.uri?eid=2-s2.0-84880811395&partnerID=40&md5=472432b06eb7697117b0164ec0c31011

D. Lucrări publicate în ultimii 10 anii în reviste şi volume de conferinţe cu referenţi (neindexate)

- Reviste

1 Mocean Loredana, **Vlad Miranda-Petronella**, DATABASE SECURITY IN RDF TERMS, PU B L I S H E R "NICOLAE BĂLCESCU" LAND FORCES ACADEMY Sibiu 2023, ISSN 2247-8396, ISSN-L = 1224-5178, Scientific Bulletin, Vol. XXVIII, Issue 1(55)/2023, https://www.armyacademy.ro/engleza/buletin.php

2 Mocean Loredana, **Vlad Miranda-Petronella**, METHODS OF STATIC PROTECTION OF WORD DOCUMENTS, Buletin Stiintific Volumul XXVII Issue 2, p131-141, Editura ACADEMIEI FORŢELOR TERESTRE „NICOLAE BĂLCESCU" SIBIU, 2022, ISSN 2247-8396, ISSN-L = 1224-5178, Scientific Bulletin is indexed in several International Databases, https://www.armyacademy.ro/engleza/buletin.php

3 Mocean Loredana, **Vlad Miranda-Petronella**, ORGANIZATIONAL LIBRARY, QUAESTUS NR. 21/ IUNIE 2022, ISSN 2285 – 424X ISSN-L 2285 – 424X ISSN online 2343-8134, http://www.quaestus.ro/wp-content/uploads/2012/03/ Quaestus-21-B5.pdf, RePEc EconPapers, http://econpapers.repe, c.org/article/defaultO.htm#Q, DOAJ http://www.doaj.org/, Index,Copernicus International http://journals.indexcopernicus. Com/ masterlist.php?q=quaestus ProQuest

4 Mocean Loredana, **Vlad Miranda-Petronella**, INFORMATION TECHNOLOGY EVENT MANAGEMENT SYSTEMS, QUAESTUS NR. 21/ IUNIE 2022, ISSN 2285 – 424X ISSN-L 2285 – 424X ISSN online 2343-8134, http://www.quaestus.ro/wp-content/uploads/2012/03/ Quaestus-21-B5.pdf, RePEc EconPapers, http://econpapers.repe, c.org/article/defaultO.htm#Q, DOAJ http://www.doaj.org/, Index,Copernicus International http://journals.indexcopernicus. Com/ masterlist.php?q=quaestus ProQuest

5 Mocean Loredana, **Vlad Miranda-Petronella**, MEDICAL DATA MANAGEMENT USING BUSINESS ANALYTICS, QUAESTUS NR. 19/ IUNIE 2021, ISSN 2285 – 424X ISSN-L 2285 – 424X ISSN online 2343-8134, http://www.quaestus.ro/wp-content/uploads/2012/03/Quaestus-21-B5.pdf, RePEc EconPapers, http://econpapers.repe, c.org/article/defaultO.htm#Q, DOAJ http://www.doaj.org/, Index,Copernicus International http://journals.indexcopernicus. Com/ masterlist.php?q=quaestus ProQuest

6 Mocean Loredana, **Vlad Miranda-Petronella**, A MODEL OF DATABASE PLATFORM FOR E-COMMERCE APPLICATIONS IN E-SOCIETY, The 19 th International Conference on Informatics in Economy (IE 2020) Education, Research & Business Technologies, All accepted papers of the conference will be published in Proceeding of the 19th International Conference on Informatics in Economy, (ISSN: 2247–1480), Education, Research & Business Technologies.The conference volume will be indexed in RePEC and will be sent for evaluation to ISI Thomson Reuters, http://www.conferenceie.ase.ro/wp-content/uploads/2020/05/Program-IE-2020.pdf

7 **Vlad Miranda-Petronella**, Mocean Loredana, DATABASE PROPOSAL OF A DOCUMENT MANAGEMENT SYSTEM, QUAESTUS NR. 17/ IUNIE 2020 (ANUL IX), ISSN 2285 – 424X ISSN-L 2285 – 424X ISSN online 2343-8134, https://www.quaestus.ro/numar-curent, RePEc EconPapers, http://econpapers.repe, c.org/article/defaultO.htm#Q, DOAJ http://www.doaj.org/, Index,Copernicus International http://journals.indexcopernicus. Com/ masterlist.php?q=quaestus ProQuest

8 APAN Rodica Diana; **VLAD Miranda Petronella**, BDI, Thomson Reuters, *Juridical perspectives on the increase of share capital of companies regulated by Law no. 31 of 1990; the entries registered within the trade registry regarding the increase of foreign participation in the share capital,* revista "Juridical Tribune – Tribuna Juridica", Volume 6, Special Issue, October 2016, ISSN: 2247-7195, e-ISSN 2248 – 0382, ISSN-L 2247 – 7195, http://tribunajuridica.eu/arhiva.html

9 Loghin Lucreţia-Dorina, **VLAD Miranda Petronella,** BDI, *Theaching, Learning And Assessing Oral Production In A Foreign Language. A General Approach,* QUAESTUS, Nr. 9, Anul V, 2016, Editura Eurostampa, Timişoara, pp. 215-224, ISSN-L 2285-424X, ISSN-L: 2285-424X ISSN online 2343-8134, www.eurostampa.ro

10 **VLAD Miranda Petronella,** Ţirlea Mariana Rodica, BDI, *Aspects on the Importance of Electronic Processing of Information in Calculating thr Profit Tax,* The 21th International Conference, The Knowledge-Based Organization, KBO 2015, CONFERENCE PROCEEDINGS 2 Economic, Social and Administrative Approaches To The Knowledge-Based Organization, "Nicolae Bălcescu" Land Forces Academy Publishing House, Sibiu, 11-13 June 2015, pp. 94-98, ISSN 1843-6722, www.armyacademy.ro

11 **VLAD Miranda Petronella,** Ţirlea Mariana Rodica, BDI, *Role and the Importance of the Card in the Business Environment,* Yearbook of the "George Barițiu" Institute of History in Cluj-Napoca, XII, Series Humanistica, 2014, The Publishing House of the Romanian Academy, Bucureşti, 2014, pp. 337-344, ISSN 1584-4404, www.history-cluj.ro

12 **VLAD Miranda Petronella,** Diudea Mircea, BDI, *Optimizing in library work,* QUAESTUS, Nr. 5, Anul III, 2014, Editura Eurostampa, Timişoara, pp. 230-236 ISSN-L 2285-424X, ISSN-L: 2285-424X ISSN online 2343-8134, www.eurostampa.ro

13 Ţirlea Mariana Rodica, **VLAD Miranda Petronella,** ISI CPCI indexed, *The Importance of Bank Information on the Promotion of Products,* The 19th International Conference, The Knowledge-Based Organization, KBO 2013, CONFERENCE PROCEEDINGS 2 Economic, Social and Administrative Approaches To The Knowledge-Based Organization, "Nicolae Bălcescu" Land Forces Academy Publishing House, Sibiu, 13-15 June 2013, pp. 256-260, ISSN 1843-6722, www.armyacademy.ro

14 Ţîrlea Mariana Rodica, **VLAD Miranda Petronella.,(2013),** *„Information scenarios over the risk in insurance”***,** University of Oradea, Faculty of Economic Sciences. International Conference. European Integration – New Challenges –9 th edition EINCO 2013 24-25 mai, 2013, Oradea, România, pg. 164.

15 Ţirlea Mariana Rodica, **VLAD Miranda Petronella,**.BDI, *Rolul informaticii în evaluarea întreprinderii,* Anuarul Institutului de Istorie “George Barițiu” din Cluj-Napoca XI, Series Humanistica, 2013, Ed. Academiei Române, Bucureşti, 2013, pp. 371-378, ISSN 1585-4404, www.history-cluj.ro

16 **VLAD Miranda Petronella,** RUSU Corina, BDI, *Survey on the use and the interest of individuals in online stores,* „Analele Universităţii din Oradea”, seria Ştiinţe Economice, Oradea, pp. 355-363, ISSN: 1222-569X, ISSN: 1582-5450 (format electronic), http://anale.steconomiceuoradea.ro/volume/2012/n2/050.pdf,, https://ideas.repec.org/a/ora/journl/v1y2012i2p355-363.html

17 Farahani Mohammad Reza, **VLAD Miranda Petronella, ISI**, *Computing first and second Zagreb Index, first and second Zagreb Polynomial of Capra-Designed Planar Benzenoid Series Can(C6)***,** Studia Universitas Babeş-Bolyai, Chemia, LVIII, Cluj-Napoca, 2013, 2/2013, Cluj University Press, pp. 133-142, ISSN: 1224-7154, www.studia.ubbcluj.ro

18 **VLAD Miranda Petronella,** Diudea Mircea, **BDI**, Älexandru Ioan Cuza”University Days, Faculty of Chemistry Conference & Mini-Hot-Conference: „*Recent Achievements in Organic and Supramolecular Chemistry”*, Analele ştiinţifice ale Universităţii “Alexandru Ioan Cuza” din Iaşi , ACTA CHEMICA Iași, vol.21No.2 2013, VERSITA Doi:10.2478/ACHI-2013-0009 October 31st-November 02nd 2013, Iaşi, pp.83-92, ISSN 2067-2438, ISSN (online) 2067-2446, http://www.chem.uaic.ro/ro/acta-chemica/acta_chemica.html

Data: 01.07.2025

Semnătura:

A N E X A 4 . 1

Nume Prenume: **Crăciun Ana-Maria**
Gradul didactic: Dr.
Instituția unde este titular: Universitatea Babeș-Bolyai
Facultatea: Biologie si Geologie
Departamentul: Biologie Moleculară și Biotehnologie

L I S T A
lucrărilor ştiinţifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

Facultatea de Fizică, Babes-Bolyai University, Cluj-Napoca, Romania

Titlul lucrării de doctorat: *Nanoparticule plasmonice multifuncționale pentru metode de imagistică și detecție optică (Multifunctional Plasmonic Nanoparticles For Optical Imaging And Detection Methods*)

Conducător de doctorat: Prof. Dr. Simion Aștilean

Obținerea titlului de Doctor în Fizică: 19 Dec 2012

B. Cărţi si capitole în cărţi publicate în ultimii 10 ani

M. Potara, M. Iosin, **A. M. Craciun**, I. Botiz, S. Astilean, " Polymer-coated plasmonic nanoparticles for environmental remediation: synthesis, functionalization and properties" Capitol de cart în “New Polymer Nanocomposites for Environmental Remediation”, Elsevier (2018), 361-387, ISBN:9780128110331 – *contribuții egale*

C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani

C1. Articole ISI

1. **A-M Craciun**, D. Stoia, A. Azziz, S. Astilean, M. Focsan, M. Lamy de la Chapelle, *Investigation of local field enhancement near plain and shell-coated gold nanospheres for the optimization of surface enhanced spectroscopy*, RSC Advances, 15 (2025) 20848-20862 (IF=4.6, first-autor)
2. D. Stoia, D. Maniu, M. Potara, **A. M. Craciun**, M. Edely, S. Grecu, A. Timar-Gabor, S. Astilean, M. Focsan, M. Lamy de la Chapelle, *Unveiling DNA Hybridization Dynamics via High-Sensitivity SERS Detection: Insights into Conformational Changes and Oligonucleotide Length Effects, J.* Phys Chem Lett, 16 (2025) 5610-5618 (IF=4.8)

3. **A. M. Craciun**, A. Colnita, D. Marconi, L. Barbu-Tudoran, I. Turcu, M. Focsan, A. Vasilescu, M. Potara, S. Astilean, *Fabrication and characterization of large-scale ordered silver-coated polystyrene microspheres films for surface-enhanced Raman spectroscopy*, Phys. Scr., 100 (2025) 045524 (IF=2.6, first-autor)
4. D. Stoia, E. Fazio, C. Corsaro, A. Campu, O. Soritau, **A. M. Craciun**, G. Chereches, M. Focsan, G. Neri, A. Piperno, *A graphene–poly (methacrylic acid)–gold bipyramid hybrid plasmonic nanocomposite for in vitro bioimaging and photothermal therapy*, J. Mater. Chem. B, 13 (2025) 4433-4446 (IF = 5.7)
5. V. Cucuiet, D. Maniu, **A. M. Craciun**, S. Tripon, S. Astilean, M. Lamy de la Chapelle, M. Focsan, *Probing the Local Field Enhancement Using SERS Detection of DNA Strands with Different Lengths and Grafting Strategies on Graphene Oxide Plasmonic Nanoplatforms*, J. Phys. Chem. Lett., 16 (2025) 435-442 (IF=4.8)
6. **A.M. Craciun**, S. Astilean, M. Focsan, M. Lamy de la Chapelle, *Gold nanoparticles conjugated with fluorophore-labeled DNA: overview of sensing and imaging applications*, TrAC Trends Anal. Chem., 180 (2024) 117913 (IF = 11.8, review, first-autor)
7. M. Gal, L. Gaina, T. Lovasz, E. Gal, **A. M. Craciun**, M. Focsan, A. Turza, D. Rugina, A. Brânzanic, S. Pesek, R. Silaghi-Dumitrescu, C. Cristea, *Sonochemical synthesis, optical properties and DFT studies on novel (N-arylamino) phenothiazinium dyes suitable for fluorescence cells imaging*, Spectrochim. Acta A: Mol. Biomol. Spectrosc., 322 (2024) 124768 (IF = 3.4)
8. M. Zetes, A.-M. Hada, M. Todea, L. I. Gaina, S. Astilean, **A. M. Craciun**, *Dual-emissive solid-state histidine-stabilized gold nanoclusters for applications in white-light generation*, Nanoscale Adv., 5 (2023) 5810-5818 (IF = 4.6, corresponding author)
9. I. Turcu, S. Astilean, M. Focsan, **A. M. Craciun**, A. Vasilescu, D. Marconi, A. Colnita,M. Potara, *A SERS aptasensor for a highly sensitive and selective detection of biomarkers*, Eur Biophys J Biophy, 52 (2023), Issue SUPPL 1, S209-S209
10. A. Campu, I. Muresan, **A. M. Craciun**, A. Vulpoi, S. Astilean, M. Focsan, *Innovative, Flexible and Miniaturized Microfluidic Paper-based Plasmonic Chip for Efficient Near-Infrared Metal Enhanced Fluorescence Biosensing and Imaging*, ACS Appl. Mater. Interfaces., 15 (2023) 55925–55937 (IF = 8.3)
11. M. Gal, C. Cristea, **A. M. Craciun**, A. Turza, L. Barbu-Tudoran, B. Balazs, T. Lovasz, L. Silaghi-Dumitrescu, L. Ioana Gaina, *New fluorescent electrospun polymer materials containing phenothiazinyl carboxylate metal salts for versatile latent fingerprint detection,* Dyes Pigm., 211 (111085) 2023 (IF =5.122)
12. S. Groza, B. Stoean, A. Grozav, **A. M. Craciun**, C. Cristea, L. Silaghi-Dumitrescu, D. Porumb, *Synthesis and optical properties of novel strontium tetranitrophthalocyanine*, Studia Universitatis Babes-Bolyai Chemia, 68 (2023) 17-26 (IF = 0.5)

13. A.-M. Hada, M. Zetes, M. Focsan, S. Astilean, **A.-M.Craciun**, *Photoluminescent Histidine-Stabilized Gold Nanoclusters as Efficient Sensors for Fast and Easy Visual Detection of Fe Ions in Water Using Paper-Based Portable Platform*, Int. J. Mol. Sci., 23 (2022) 12410 (IF =6.208, corresponding author)

14. M. Potara, S. Suarasan, **A-M. Craciun**, M. Focsan, A-M. Hada, S. Astilean, *Probing polyvinylpyrrolidone-passivated graphene oxide nanoflakes as contrast agents inside tissue-like phantoms via multimodal confocal microscopy,* Talanta, 247 (2022) 123581 (IF =6.556)

15. A.-M. Hada, **A.-M. Craciun**, M. Focsan, A. Vulpoi, E.-L. Borcan, S. Astilean, *Glutathione-capped gold nanoclusters as near-infrared-emitting efficient contrast agents for confocal fluorescence imaging of tissue-mimicking phantoms,* Microchim. Acta, 189 (2022) 337 (IF =6.408, corresponding author)

16. A. Campu, I. Muresan, **A.-M. Craciun**, S. Cainap, S. Astilean, M. Focsan, *Cardiac Troponin Biosensor Designs: Current Developments and Remaining Challenges,* Int. J. Mol. Sci., 23 (2022) 7728 (IF =6.208, review)

17. E. Gal, B. Brem, LI Gaina, **A. M. Craciun**, C. Cristea, L. Silaghi-Dumitrescu, *Optical properties of new 5-(phenothiazinyl) methylidenebarbituric acid derivatives,* J. Mol. Struct., 1247 (2022) 131334 (IF =3.841)

18. M. Gal, C. Cristea, T. Lovasz, A.-M. Craciun, A. Turza, D. Porumb, E. Gal, G. Katona, L. Silaghi-Dumitrescu, L. Gaina, *New fluorescent phenothiazine carboxylates for fluorescent nanomaterials,* , J. Mol. Struct., 1246 (2021) 131174 (IF =3.841)

19. A.-M. Hada, **A. M. Craciun**, S. Astilean, *Gold nanoclusters performing as contrast agents for non-invasive imaging of tissue-like phantoms via two-photon excited fluorescence lifetime imaging,* Analyst, 146 (2021) 7126-7130 (IF =5.227, issue back-cover, corresponding author)

20. S. Suarasan, C. Tira, M. M. Rusu, **A.-M. Craciun**, M. Focsan, *Controlled Fluorescence Manipulation by Core-Shell Multilayer of Spherical Gold Nanoparticles: Theoretical and Experimental evaluation,* J. Mol. Struct., 1244 (2021) 130950 (IF =3.841)

21. A.-M. Hada, M. Zetes, M. Focsan, T. Nagy-Simon, **A. M. Craciun**, *Novel paper-based sensing platform using photoluminescent gold nanoclusters for easy, sensitive and selective naked-eye detection of* Cu^{2+}, J. Mol. Struct., 1244 (2021) 130990 (IF =3.841, corresponding author)

22. **A. M. Craciun**, L. Susu, M. Baia *Two-photon excited photoluminescence lifetime imaging studies on individual gelatin-coated gold nanorods,* J. Mol. Struct., 1243 (2021) 130785 (IF =3.841, first-autor and corresponding author)

23. T. Nagy-Simon, O. Diaconu, M. Focsan, A. Vulpoi, I. Botiz, **A. M. Craciun**, *Pluronic stabilized conjugated polymer nanoparticles for NIR fluorescence imaging and dual phototherapy application,* J. Mol. Struct., 1243 (2021) 130931 (IF =3.841)

24. A.M. Hada, **A. M. Craciun**, S. Astilean, *Intrinsic Photoluminescence of Solid-State Gold Nanoclusters: Towards Fluorescence Lifetime Imaging of Tissue-Like Phantoms Under Two-Photon Near-Infrared Excitation*, Front. Chem., 9 (2021) 761711 (IF =5.545, corresponding author)

25. **A.-M. Craciun**, S. Suarasan, M. Focsan, S. Astilean, *One-photon excited photoluminescence of gold nanospheres and its application in prostate specific antigen detection via fluorescence correlation spectroscopy*, Talanta, 228 (2021) 122242 (IF =6.556, first-autor and corresponding author)

26. A. M. Hada, **A. M. Craciun**, M. Focsan, R. Borlan, O. Soritau, M. Todea, S. Astilean, *Folic acid functionalized gold nanoclusters for enabling targeted fluorescence imaging of human ovarian cancer cell*, Talanta, 225 (2021) 121960 (IF =6.556, corresponding author)

27. B. Stoean, D. Rugina, M. Focsan, **A.-M. Craciun**, M. Nistor, T. Lovasz, A. Turza, I-D. Porumb, E. Gál, C. Cristea, L. Silaghi-Dumitrescu, S. Astilean and L. Gaina, *Novel (Phenothiazinyl) Vinyl-Pyridinium Dyes and Their Potential Applications as Cellular Staining Agents*, Int. J. Mol. Sci., 22 (2021) 2985 (IF =6.208)

28. C. Farcau, **A.M. Craciun**, R. Vallée, *Surface-enhanced fluorescence imaging on linear arrays of plasmonic half-shells*, J. Chem. Phys., 153 (2020) 164701 (IF =3.488)

29. A. Campu, F. Lerouge, **A. M. Craciun**, T. Murariu, I. Turcu, S. Astilean, M. Focsan, *Microfluidic platform for integrated plasmonic detection in laminal flow*, Nanotechnology, 31 (2020) 335502 (IF =3.874)

30. A. P. Crisan, **A. M. Craciun**, I. Mihalache, M. Focsan, C. Socaci, D. Maniu, S. Astilean, L. M. Veca, A. Terec, *Surface passivation of carbon nanoparticles with 1,2-phenylenediamine towards photoluminescent carbon dots*, Rev. Roum. Chim., 65 (2020) 559-566 (IF =0.278)

31. A. Campu, **A. M. Craciun**, M. Focsan, S. Astilean, *Assessment of the photothermal conversion efficiencies of tunable gold bipyramids under irradiation by two laser lines in a NIR biological window*, Nanotechnology, 30 (2019) 405701 (IF =3.551)

32. S. Suarasan, **A.M. Craciun**, E. Licarete, M. Focsan, K. Magyari, S. Astilean, *Intracellular Dynamic Disentangling of Doxorubicin Release from Luminescent Nanogold Carriers by Fluorescence Lifetime Imaging Microscopy (FLIM) under Two-Photon Excitation*, ACS Appl. Mater. Interfaces, 118 (2019) 7812 - 7822 (IF =8.758)

33. A. Campu, L. Susu, F. Orzan, D. Maniu, **A.M. Craciun**, A. Vulpoi, L. Roiban, M. Focsan, S. Astilean, *Multimodal Biosensing on Paper-Based Platform Fabricated by Plasmonic Calligraphy Using Gold Nanobypiramids Ink*, Front. Chem., 7 (2019) 55 (IF =3.693)

34. O. Todor-Boer, I. Petrovai, R. Tarcan, **A. M. Craciun**, L. David, S. B. Angyus, S. Astilean, I. Botiz, *Altering the optoelectronic properties of neat and blended conjugated polymer films by controlling the process of film deposition*, J. Optoelectron. Adv. Mater., 21(2019) 367-372 (IF =0.631)

35. S. Suarasan, E. Licarete, S. Astilean, **A. M. Craciun**, *Probing cellular uptake and tracking of differently shaped gelatin-coated gold nanoparticles inside of ovarian cancer cells by two-photon excited photoluminescence analyzed by fluorescence lifetime imaging (FLIM)*, Colloid Surf. B, 166 (2018) 135 - 143 (IF =3.973, corresponding author)

36. T. Nagy-Simon, M. Potara, **A. M. Craciun**, E. Licarete, S. Astilean, *IR780-dye loaded gold nanoparticles as new near infrared activatable nanotheranostic agents for simultaneous photodynamic and photothermal therapy and intracellular tracking by surface enhanced resonant Raman scattering imaging*, J. Colloid. Interface Sci., 517 (2018) 239 – 250 (IF =6.361)

37. L. Susu, A. Campu, **A. M. Craciun**, A. Vulpoi, S. Astilean, *M. Focsan, Designing Efficient Low-Cost Paper-Based Sensing Plasmonic Nanoplatforms*, Sensors, 18 (2018) 3035 (IF =3.031)

38. A. Campu, F. Lerouge, D. Chateau, F. Chaput, P. Baldeck, S. Parola, D. Maniu, **A. M. Craciun**, A. Vulpoi, S. Simion, M. Focsan, *Gold NanoBipyramids Performing as Highly Sensitive Dual-Modal Optical Immunosensors*, Anal. Chem., 90 (2018) 8567 – 8575 (IF =6.350)

39. M. Potara, T. Nagy Simon, **A. M. Craciun**, S. Suarasan, E. Licarete, F. Imre Lucaci, S. Astilean, *Carboplatin-Loaded, Raman-Encoded, Chitosan-Coated Silver Nanotriangles as Multimodal Traceable Nanotherapeutic Delivery Systems and pH Reporters inside Human Ovarian Cancer Cell*, ACS Appl. Mater. Interfaces, 9 (2017) 32565 – 32576 (IF =8.097)

40. **A. M. Craciun**, M. Focsan, K. Magyari, A. Vulpoi, Z. Pap, *Surface Plasmon Resonance or Biocompatibility-Key Properties for Determining the Applicability of Noble Metal Nanoparticles*, Materials, 10 (2017) 836 (IF =2.467, review, equal contributions)

41. T. Nagy-Simon, A.-S. Tatar, **A. M. Craciun**, A. Vulpoi, M.-A. Jurj, A. Florea, C. Tomuleasa, I.Berindan-Neagoe, S. Astilean, S. Boca, *Antibody conjugated, Raman tagged hollow gold-silver nanospheres for specific targeting and multimodal Dark Field/ SERS/ Two Photon-FLIM imaging of CD19(+) B lymphoblasts*, ACS Appl. Mater. Interfaces, 9 (2017) 21155 – 21168 (IF =8.097)

42. D. Zaharie-Butucel, M. Potara, **A.M. Craciun**, R. Boukherroub, S. Szunerits, S. Astilean, *Revealing the structure and functionality of graphene oxide and reduced graphene oxide/pyrene carboxylic acid interfaces by correlative spectral and imaging analysis*, Phys. Chem. Chem. Phys., 19 (2017) 16038 – 16046 (IF =3.906)

43. M. Focsan, **A. M. Craciun**, M. Potara, C. Leordean, D. Maniu, S. Astilean, *Flexible and Tunable 3D Gold Nanocups Platform as Plasmonic Biosensor for Specific Dual LSPR-SERS Immuno-Detection*, Sci. Rep., 7 (2017) 14240 (IF =4.122, Top 100 read chemistry papers for Scientific Reports in 2017)

44. **A. M. Craciun**, M. Focsan, L. Gaina, S. Astilean, *Enhanced one- and two-photon excited fluorescence of cationic (phenothiazinyl)vinyl-pyridinium chromophore] attached to polyelectrolyte-coated gold nanorods*, Dyes Pigm., 136 (2017) 24-30 (IF =3.767, first-autor, TOP 1 in Q1 area)

45. M. Focsan (Iosin), A. Campu, **A. M Craciun**, M. Potara, C. Leordean, D. Maniu, S. Astilean, *A Simple and Efficient Design to Improve the Detection of Biotin-Streptavidin Interaction with Plasmonic Nanobiosensors*, Biosens. Bioelectron., 86 (2016) 728-735 (IF =7.780)

46. **A. M. Craciun**, A. Diac, M. Focsan, C. Socaci, K. Magyari, D. Maniu, I. Mihalache, L. M. Veca, A. Terec, S.Astilean, *Surface passivation of carbon nanoparticles with p-phenylenediamine towards photoluminescent carbon dots*, RSC Adv., 6 (2016) 56944-56951 (IF =3.108, first-autor)

47. M. Focsan, **A. M. Craciun**, Simion Astilean, and Patrice L. Baldeck, *Two-photon fabrication of three-dimensional silver microstructures in microfluidic channels for volumetric surface-enhanced Raman scattering detection*, Opt. Mater. Express, 6 (2016) 1587-1593 (IF =2.591)

48. B. Brem, E. Gal, L. Gaina, C. Cristea, **A. M. Gabudean**, S. Astilean, L. Silaghi-Dumitrescu, *Metallo complexes of meso-phenothiazinylporphyrins: synthesis, linear and nonlinear optical properties*, Dyes Pigm., 123 (2015) 386-395 (IF =4.055, TOP 1 în Q1)

49. C. Leordean, B. Marta, **A. M. Gabudean**, M. Focsan, I. Botiz and S. Astilean, *Fabrication of highly active and cost effective SERS plasmonic substrates by electrophoretic deposition of gold nanoparticles on a DVD template*, Appl. Surf.Sci., 349 (2015) 190–195 (IF =3.150)

50. T. Simon, M. Potara, **A. M. Gabudean**, E. Licarete, M. Banciu, S. Astilean, *Designing Theranostic Agents Based on Pluronic Stabilized Gold Nanoaggregates Loaded with Methylene Blue for Multimodal Cell Imaging and Enhanced Photodynamic Therapy*, ACS Appl. Mater. Interfaces, 7 (2015) 16191-16201 (IF =7.145)

51. I. Botiz, P. Freyberg, C. Leordean, **A.M. Gabudean**,S. Astilean, A. C.-M. Yang, N. Stingelin, *Emission properties of MEH-PPV in thin films simultaneously illuminated and annealed at different temperatures*, Synth. Met., 199 (2015) 33–36 (IF =2.299)

52. P. Moutet, N. M. Sangeetha, L. Ressier, N. Vilar-Vidal, M. Comesana-Hermo, S. Ravaine, R. A. L. Vallee, **A. M. Gabudean**, S. Astilean, C. Farcau, *Surface-enhanced spectroscopy on plasmonic oligomers assembled by AFM nanoxerography*, Nanoscale, 7 (2015) 2009-2022 (IF =7.760)

53. A. Diac, M. Focsan, C. Socaci. **A. M. Gabudean**, C. Farcau, D. Maniu, E. Vasile, A. Terec, L. M. Veca, S. Astilean, *Covalent conjugation of carbon dots with Rhodamine B and assessment of their photophysical properties*, RSC Adv., 5 (2015) 77662-77669 (IF =3.289)

C2. Articole BDI

1. L.C. Susu, **A. M. Craciun**, S. Astilean, *Synthesis and characterization of polydopamine-coated gold nanorods*, Studia UBB Physica, 62 (2017) 23-31

D. Lucrări publicate în ultimii 10 anii în reviste şi volume de conferinţe cu referenţi (neindexate)

- Reviste

- Selecţie cu maximum 20 lucrări în volume de conferinţe

E. Brevete obţinute în întreaga activitate

1. M. Focsan, A. Campu, **A. M. Craciun**, S. Astilean, *Dispozitiv microfluidic de detecţie fabricat prin integrarea de hârtie plasmonică caligrafiată în polidimetilsiloxan*, O.S.I.M. Romania, 2021 (RO 135233 A0), published în 2023 (RO135233 (B1))

Data: 01.07.2025 **Semnătura:**

A N E X A 4 . 1

Nume Prenume: **Bogdan (căs. Panait) Diana Felicia**
Gradul didactic: Asistent cercetare / universitar
Instituția unde este titular: Universitatea Babeș-Bolyai
Facultatea: Biologie și Geologie
Departamentul: Biologie Moleculară și Biotehnologie

L I S T A
lucrărilor ştiinţifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

Doctor în Biologie al Universității Babeș-Bolyai – 27 iunie 2025 (https://doctorat.ubbcluj.ro/ro/sustinerile-publice-ale-tezelor-de-doctorat/?an=2025&luna=6&facultate=4&domeniu=0)
Titlul tezei: *Diversity and potential roles of prokaryotic communities in Romanian cave ecosystems*.
Conducător științific: Prof. Dr. Horia L. Banciu

B. Cărţi si capitole în cărţi publicate în ultimii 10 ani

Nu este cazul.

C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani

C1. Porav, A. S., Bocăneală, M., Fălămaş, A., **Bogdan, D. F.**, Barbu-Tudoran, L., Hegeduş, A., and Dragoş, N. (2020). *Sequential aqueous two-phase system for simultaneous purification of cyanobacterial phycobiliproteins*. Bioresource technology, 315, 123794, https://doi.org/10.1016/j.biortech.2020.123794 (ISI)

C2. Chiciudean, I., Russo, G., **Bogdan, D.F.**, Levei, E.A., Faur, L., Hillebrand-Voiculescu, A., Moldovan, O.T., and Banciu, H.L., (2022), *Competition-cooperation in the chemoautotrophic ecosystem of Movile Cave: first metagenomic approach on sediments*. Environmental Microbiome 17, 44, https://doi.org/10.1186/s40793-022-00438-w (ISI)

C3. **Bogdan D.F.**, Baricz A.I., Chiciudean I., Bulzu P.A., Cristea A., Năstase-Bucur R., Levei E.A., Cadar O., Sitar C., Banciu H.L. and Moldovan O.T., (2023), *Diversity, distribution and organic substrates preferences of microbial communities of a low anthropic activity cave in North-Western Romania*. Frontiers in Microbiology 14:962452, https://doi.org/10.3389/fmicb.2023.962452 (ISI)

C4. **Panait, D.F.**, Panait, A.M., Cristea, A., Levei, E.A., Moldovan, O.M., and Banciu, H.L., (2025), *Community-level physiological profiling of carbon substrate metabolization by microbial communities*

associated to sediments and water in karstic caves from Romania, Studia Universitatis Biologia, 70, 1, https://doi.org/10.24193/subbbiol.2025.1 (BDI)

D. Lucrări publicate în ultimii 10 anii în reviste şi volume de conferinţe cu referenţi (neindexate)

- Reviste

D1. Chiciudean, I., **Bogdan**, **D.F**., Moldovan, O.T., and Banciu, H.L., (2022), *A glimpse into the biosynthetic potential and resistome of microbial communities inhabiting sulfidic, chemoautotrophic Movile Cave ecosystem*, ARPHA Conference Abstracts 5: e86928, doi: 10.3897/aca.5.e86928

D2. Dudaș, M. A., Râtea, C., Cucerea, M. C., Rusneac, M., Münzlinger, A., **Panait, D. F**., Mircea, C., Rusu, V., The Influence of Birth Type on Neonatal Gut Microbiota Diversity, Global Microbiome Congress Proceeding Book

- Selecţie cu maximum 20 lucrări în volume de conferinţe

-

E. Brevete obţinute în întreaga activitate

Nu este cazul.

Data: 01.07.2025

Semnătura:

A N E X A 4 . 1

Nume Prenume: **Tork Souad-Diana**
Gradul didactic: Lector universitar
Instituția unde este titular: Universitatea Babeş-Bolyai
Facultatea: Chimie și Inginerie Chimică
Departamentul: Chimie

L I S T A
lucrărilor ştiinţifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

Titlul tezei: Engineered PALs for preparative scale production of L- and D-phenylalanine analogues (Enzime PAL obținute prin inginerie proteică pentru producția la scară preparativă a analogilor de L- și D-fenilalanină)
Limbă redactare: engleză
Coordonator: Prof. Dr. Ing. Irimie Florin-Dan, Facultatea de Chimie și Inginerie Chimică, Cluj-Napoca

Susținere publică: 28 aprilie 2023, Universitatea Babeş-Bolyai, Cluj-Napoca
Referenți:

Prof. Dr. Bioing. Galaction Anca-Irina – Universitatea de Medicină și Farmacie "Grigore T. Popa", Facultatea de Bioinginerie Medicală, Iași
Prof. Dr. Kilar Ferencz – Institutul de Bioanaliză, Facultatea de Medicină, Universitatea Pécs, Ungaria
Prof. Dr. Ing. Peter Francisc – Facultatea de Chimie Industrială și Ingineria mediului, Universitatea Politehnică, Timișoara

B. Cărţi si capitole în cărţi publicate în ultimii 10 ani

1. Nagy E.Z.A., **Tork S.D**., Filip A., Poppe L., Toşa M.I., Paizs C., Bencze L.C, Applied Biocatalysis: The Chemist's Enzyme Toolbox - Chapter 5.5 Other Carbon–Nitrogen Bond-Forming Biotransformations - 5.5 Production of L- and D- phenylalanine analogues using tailored phenylalanine ammonia-lyases, **2020**, Editura Wiley, ISBN: 978-1-119-48701-2

C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani

1. **Tork S.D.**, Nagy E.Z.A., Cserepes L., Tomoiagă R.B., Bencze L.C., Engineered, scalable production of optically pure L-phenylalanines using phenylalanine ammonia-lyase from *Arabidopsis thaliana*, *The Journal of Organic Chemistry* **2023**, *88*: 852
DOI: 10.1021/acs.joc.2c02106
2. Tomoiagă R.B., **Tork S.D**., Filip A., Nagy L.C., Bencze L.C., Phenylalanine ammonia lyases: protein engineering versus natural diversity, *Applied Microbiology and Biotechnology*, **2023**, *107*: 1243
DOI: 10.1007/s00253-023-12374-x

3. **Tork S.D.**, Moisă M.E., Cserepes L., Filip A., Nagy L.C., Irimie F.D., Bencze L.C., Towards a general approach for tailoring the hydrophobic binding site of phenylalanine ammonia-lyases, *Scientific Reports* **2022**, *12*: 10606.
DOI: 10.1038/s41598-022-14585-0

4. Tomoiagă R.B., **Tork S.D**., Horváth I., Filip A., Nagy L.C., Bencze L.C., Saturation mutagenesis for phenylalanine ammonia lyases of enhanced catalytic properties, *Biomolecules*, **2020**, *10*: 838.
DOI: 10.3390/biom10060838

5. Nagy E.Z.A., **Tork S.D**., Lang P.A., Filip A., Irimie F.D., Poppe L., Toşa M.I., Schofield C.J., Brem J., Paizs C., Bencze L.C., Mapping the hydrophobic substrate binding site of phenylalanine ammonia-lyase from *Petroselinum crispum, ACS Catalysis*, **2019**, *9*: 8825.
DOI: 10.1021/acscatal.9b02108

6. **Tork S.D**., Nagy E.Z.A., Cserepes L., Bordea D.M., Nagy B., Toşa M.I., Paizs C., Bencze L.C., The production of L- and D-phenylalanines using engineered phenylalanine ammonia lyases from *Petroselinum crispum, Scientific Reports* **2019**, 9: 20123.
DOI: 10.1038/s41598-019-56554-0

7. Filip A., Nagy E.Z.A., **Tork S.D**., Bánóczi G., Toşa M.I., Irimie F.D., Poppe L., Csaba P., Bencze L.C., Tailored mutants of phenylalanine ammonia-lyase from *Petroselinum crispum* for the synthesis of bulky L- and D-arylalanines, *ChemCatChem*, **2018**, *10*: 2627.
DOI: 10.1002/cctc.201800258

D. Lucrări publicate în ultimii 10 anii în reviste şi volume de conferinţe cu referenţi (neindexate)

- Reviste

-

- Selecţie cu maximum 20 lucrări în volume de conferinţe

1. Horváth I., Tomoiaga R., Tork S.D., Nagy L.C., Bencze L.C., Fenilalanin Ammónia-Liázok Termostabilitásának Növelése Fehérjemérnökség által, *Acta Scientiarum Transylvanica* **2019**, *25*(3): 38-53; ISSN: 1842-5070

2. Tork S.D., Nagy E.Z.A., Filip A., Irimie F.D., Monica I. T., Brem J., Paizs C., Bencze L.C Improvement of the catalytic properties of PAL (phenylalanine ammonia lyases) from *Petroselinum cryspum* by protein engineering techniques, *New Front Chem* **2019**, *28*:67-107; ISSN: 2393-2171

E. Brevete obţinute în întreaga activitate

-

Data: **Semnătura:**

01.07.2025