

PERSONAL DATA Name: Ioana Baldea



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Date and place of birth: May 1, 1976, Cluj-Napoca, Romania

Nationality: romanian

CURRENT POSITION

Associate professor, Department of Physiology, Faculty of General Medicine, University of Medicine and Pharmacy, Cluj-Napoca, Romania

Work address: Department of Physiology, "Iuliu Hatieganu" University of Medicine and Pharmacy Clinicilor 1, Cluj-Napoca, Romania

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EDUCATION AND TRAINING

2018- Associate professor, Department of Physiology, University of Medicine and Pharmacy, Cluj-Napoca, Romania

2016 - Lecturer, Department of Physiology, University of Medicine and Pharmacy, Cluj-Napoca, Romania

2009 - Assistant professor, Department of Physiology and PhD student, Department of Dermatology

2010 – PhD in Medicine, speciality dermatovenereology

2014-2015- postdoctoral fellow of the University of Medicine and Pharmacy, Cluj-Napoca, Romania, POSDRU/159/1.5 /S/138776 TRANSCENT

2016- Lecturer, Department of Physiology and PhD student Department of Dermatology, University of Medicine and Pharmacy, Cluj-Napoca, Romania

Teaching activity, research in the domain of cellular biology

2006 - specialist in Dermatovenerology,

2001-2006- resident dermatovenerology- Department of Dermatology, Emergency County Hospital, Clinicilor 1-3, 400006, Cluj-Napoca, Romania

Clinical activity, research in the domain of cellular biology

1994–2000-University of Medicine and Pharmacy, Cluj-Napoca, Romania

EDUCATION Training Courses

2003 Praga, Cehia -Melanoma Symposium, Occupational Diseases, Skin Disorders of Pregnancy, European Academy of Dermatology (EADV)

2004, Londra, Anglia- Paediatric Dermatology, Dermatoimmunology and Allergic Skin Disease,

Genetics in Dermatology, EADV
 2004, Cluj-Napoca- Cosmetic Dermatology, Dermatological Surgery, Dermoscopy, Department of Dermatology, Cluj-Napoca
 2005-Saariselka, Finlanda- EADV scholarship for Cryotherapy Course and Congress participation
 2006- Cluj-Napoca -Diagnostic and treatment of cutaneous melanoma, POSDRU (2007-2013) project, "Carol Davila" University of Medicine and Pharmacy, Bucharest
2019 – “Applied *in vitro* toxicology course”, organized by ESTIV (European Society for Toxicology *in vitro*) and ASCCT (American Society for Cellular and Computational Toxicology)
 2023 - “*Cultivation of Cells in 3D*”, online course, organized by Ibidi GmbH, Germany
 2023 - “*Cell-based & Biochemical Assays*” seminar, organized by Promega, GmbH, (Germany) at USAMV, Cluj-Napoca, 08 07 2023

Experience exchanges

2005- training stage in the Dermatology Research lab of the University Hospital in Freiburg,
 2006- research stage Dermatology Research lab in AKH, University Hospital, Vienna, Austria,

Summer school

2009- Praga, Cehia, 7th International Stem Cell School in Regenerative Medicine si cursul practic de „Biomaterials” sustinut de European Union Grant al European Union Marie Curie Conferences and Training Courses „RegMedTeach” organised by the Institute of Experimental Medicine, Academy of Sciences of the Czech Republic, Prague,
 2010- Stockholm, Suedia, 8th International Stem Cell School in Regenerative Medicine sustinut de European Union Grants al European Union Marie Curie Conferences and Training Courses „RegMedTeach” organised by Karolinska Medical Institute
 2014- Valea Mariei, Satu-Mare, Romania, organised within the project- TRANSCENT”, POSDRU/159/1.5 /S/138776

**PERSONAL
 COMPETENCES**

Research themes: dermatology, photodynamic therapy, photo dermatology, pigment cells biology, nanomedicine, dental materials biocompatibility, toxicity.
Areas of expertise: cell biology, *in vitro* cultivation of cell cultures, isolation of primary cells, normal (skin cells-keratinocytes, melanocytes, rat bone marrow stem cells), cytotoxicity and biocompatibility testing of materials and substances *in vitro on 2D and 3D models* and *in vivo*, apoptosis. Techniques: flow cytometry analysis, immunohistochemistry, immunofluorescence, confocal microscopy, ELISA, Western Blot, spectrophotometry, statistical analysis, image manipulation, scientific manuscript writing

MATERNAL LANGUAGE romanian

FOREIGN LANGUAGES English, French

Self evaluation European level (*)	COMPREHENSION		SPEAKING		WRITING
	Listening	Reading	Conversation	Oral Discourse	Essay
English	C1	C1	C1	C2	C1
French	B1	B1	A1	A1	A1

(*) European Level

SOCIAL COMPETENCES Communication abilities, teamwork, adaptability, flexibility

MANAGERIAL COMPETENCES 2011-2013 **Principal investigator-** „*Mechanisms of cell death following photodynamic therapy with innovative porphyrins in melanoma and other malignancies*”, University Internal Grant 27020/ 9/ 15112011 funding agency: University of Medicine and Pharmacy, Cluj, 8000 euros, www.umfcluj.ro

2014-2015 **Project coordinator:** „*Mechanisms of cell death and inflammation induction after photodynamic therapy with Porphyridium Purpureum, a natural photosensitizer in human melanoma cultures - in vitro study*”, University Internal Grant for students -Nenu Iuliana - **mentor** –1493/4/28.01.2014, funding agency: University of Medicine and Pharmacy, Cluj, 2000 euros, www.umfcluj.ro

2014-2015 **Postdoctoral research fellowship:** “*In vitro study of the mechanisms of apoptosis and inflammation induced by photodynamic therapy with innovative porphyrins in melanoma*”, funding agency: European Social Found, Human Resources Development Operational Program 2007-2013, project no. POSDRU/159/1.5/S/138776, www.umfcluj.ro

2016-2017 **Principal investigator-** „*Inovative strategies of photodynamic therapy with complex photosensitizers in melanoma- graphenes functionalised with metal substituted porphyrins*”, University Internal Grant 4945/4/08.03.2016, funding agency: University of Medicine and Pharmacy, Cluj, 8000 euros, www.umfcluj.ro

2016-2018 **Responsible partner-** PED 157/2016 - *Revival of an old drug by crystal engineering: development of improved ketoconazole based anti-fungal products*

2021- **Project director-** TE60/2022 PN-III-P1-1.1-TE-2021-0159, within PNCDI III - *Anticancer effects induced by magnetic nanoparticles linked with doxorubicin exposed to an alternative magnetic field (ONCOMACH)*

Coordinator of 10 license thesis, 1 dissertation thesis

ORGANISER ABILITIES

Organizer of the research work in the cell culture lab of the Physiology Department
2011-2025 Organizer of 7 workshops at the Medicalis Congresses for students and young doctors, entitled: *Stem cells in regenerative medicine* and *Photodynamic therapy in melanoma*
2010 Supervisor of medical students from the University of Medicine and Pharmacy, Cluj at the 8th International Physiology Quiz competition in Kuala Lumpur, Malaysia
2024-2025 Coordinator of the Physiology Scientific Circle- English Section

OTHER COMPETENCES**Mentorship – research grants**

2014-2016 mentor – University of Medicine and Pharmacy *Iuliu Hatieganu*, Internal Grant for Students No 1493/4/28.01.2014, project leader Nenu Iuliana: „*Mechanisms of cell death and inflammation induction after photodynamic therapy with Porphyridium Purpureum, a natural photosensitizer in human melanoma cultures - in vitro study*”, research activities in vitro were developed at the Research facility at the Physiology Department, University of Medicine and Pharmacy, Cluj-Napoca and were finalized with 2 ISI articles: DOI:10.1371/journal.pone.0173241 and DOI 10.1007/s13277-015-3639-0.

01.01.2025 – 30.06.2027, mentor for the Internal Grant No. 32154/34 of the University of Medicine and Pharmacy *Iuliu Hatieganu*, project leader - assistant professor Iulia-Ioana Morar; the project is entitled „*The effects of the Chelidonium extract and three types of brown Romanian honey on experimental thermal burns*”, an ongoing project with *in vivo* experimental studies, scheduled at the Physiopathology and Physiology Research Facilities

Membership of the PhD student guidance committee

1. Diana Valentina Tudor - *Mechanisms of pro tumoral and antitumoral action in cutaneous melanoma* 2018-2021
2. Mihai Lupu - *Iron homeostasis and cardiac pathology*, 2019-2023
3. Iuliana Nenu - *Factors predicting therapies in hepatocarcinoma*, 2020-2024
4. Remus Moldovan - *Modulation of normal and pathological vascular reactivity under the action of natural and synthetic products*, 2020-2024
5. Cristian Marius Florea - *New risk factors in cardiovascular pathology - the influence of the intestinal microbiome and its metabolites in atherosclerosis and atrial fibrillation*, 2021-2024
6. Teodora Dobrican - *The immunological signature and the role of the mast cell in chronic urticaria – implications in identifying new therapeutic targets*, 2021-2024
7. Andrei Mitre – *Ferroptosis and inflammation modulation in experimentally induced sepsis*, 2022- ongoing

Operation of the Microsoft Office™, Image Lab (Biorad), Image J programs, statistical analysis in Graph Pad, Origene ProLab Program

Reviewer for international ISI journals - Medicine, Oncology, Biochemistry, Biophysics, Pharmacology (IF-0.5-13.9)

**SUPPLEMENTAL
INFORMATION
PUBLICATIONS**

82 articles in ISI journals with impact factor (IF), Hirsch index=26 WSCC, 1 book, 3 book chapters
53 papers presented at scientific conferences

**INVITED
SPEAKER**

the 5th -10th International Conference on Oxidative Stress in Skin Medicine and Biology, Greece,
September **2011, 2016, 2018, 2021, 2024 oral presentations**

PROJECTS

European

member of the **management committee (MC) for Romania**

ID: CA21108 Consortium COST (OC-2021-1-25129) "*European Network for Skin Engineering and Modeling*", Acronym: NETSKINMODELS, Duration: 2022 – 2026, <https://netskinmodels-cost.com/>

National

Project director- TE60/2022 PN-III-P1-1.1-TE-2021-0159, within PNCDI III - *Anticancer effects induced by magnetic nanoparticles linked with doxorubicin exposed to an alternative magnetic field (ONCOMACH)*, 2021-2024

Responsible partner University of Medicine and Pharmacy - PN-III-P2-2.1-PED-2016-1521 - *Revival of an old drug by crystal engineering: development of improved ketoconazole based antifungal products*, 2016-2018, Xenia Filip

Member in the research team of **17 national research projects**

1. CNCSIS Grant (nr 33382/20 06 04): *The cultivation technology of the keratinocytes and melanocytes in vitro – grafting of the keratinocytes and melanocytes*. Research program – CNCSIS grant type A, Cosgarea Rodica
2. CEEX, "*Molecular diagnostic of the bulous epidermolysis. Modern research techniques, diagnosis, treatment and prevention of bulous epidermolysis*. National register of the genodermatosis – DEGEB" Cosgarea R, 2006-2008
3. CEEX, title "Biocomposite with porphyrins with applicability in the photodynamic therapy of the cutaneous malignant tumors -PORFIDERM" Simina Dreve, 2006-2008
4. PN II Partnership 72-190/ 2008: "*Complex biomaterials with advanced degree of specificity used in endodontic treatment*", ENDODENT", Marioara Moldovan
5. PN II Partnership 165/2012 PN-II-PT-PCCA-2011-3.2-1275, *New generation of biomaterials for cosmetic dentistry*, Moldovan Marioara, 2014-2016
6. PN II Partnership 2008 42/ 104/01102008, „*Photochemoprotection through natural products in photoinduced epitelial cancers*” Gabriela Adriana Filip, 2008-2010
7. PN II Partnership PN-II-PT-PCCA-2011-3.1-0914 type 1” *Dermatological products based on hybrid materials obtained from anthocyan and metallic nanoparticles*” Olenic Liliana, 2012-2015
8. PN II Partnership 189/2012, PNII-PT-PCCA-2011-3.2-1419 *Novel advanced smart biomaterials of giomer type with applications in dentistry*, GIODENT, Prejmerean Cristina, 2012-2014
9. PN II Partnership 230/2014 PN-II-PT-PCCA-2013-4-1282 “*New composite materials based on biocompatible polimers and graphenes for dental applications*”, Pruneanu Stela Maria, 2014-2016
10. PN II Partnership 191/2014. PN-II-PT-PCCA-2013-4-1198. “*Naturally derived platelets antiaggregants in primary cardiovascular prevention*”, Oprean Radu, 2014-2016
11. PN II Partnership PNII-PT-PCCA-2013-4-0917, PECIFCO; *Personalized cranio-facial implants obtained by innovative 3D prototyping from composite materials reinforced with fiber glass*, Alexandru Horatiu Rotar, 2014-2016
- 12.ID: PN III PED-PN-P2.1-PED-2016-1415, ctr. no. 142PED/2017 Project title: "*Photodynamic therapy with natural photosensitizers used in oral biofilm control*" Project director: Prof. Dr. Mândra Badea Eugenia Project duration: 2016-2018 UMF project value: 350,000 lei
- 13.ID: PN-III-P4-ID-PCE-2016-0396 Project title: "*Signaling pathways and target molecules involved in chemoprevention with conjugates obtained from silver nanoparticles and natural extracts in oral carcinogenesis*" Project director: Prof. Dr. Filip Adriana Project duration: 2017-2019 UMF value: 850,000 lei
14. ID: PN-III-P2-2.1-PED2019-2953/ctr. no. 334/2020 Project title: "*New materials for the minimally invasive treatment of incipient dental caries and white spots*" Project manager: Dr. Gasparik Cristina Project duration: 2020-2022 UMF project value: 150,000 lei

15. Project PN-III-P1-1.1-TE-2021-0159/ctr. no. TE60/2022: "*Identification of the neuroprotective potential of Cynarae folium and the signaling pathways in in vitro and in vivo models of Alzheimer's disease*" (NEUROPROTECT) Project director: Dr. Sevastre Berghian Alexandra Project duration: 2022-2024, UMF budget: 450,000 lei.

16. PN-III-P1-1.1-TE-2021-0511 - "*Antidiabetic potential of some new bio nanostructures: Perspectives as therapeutic agents*", within UBB, Cluj-Napoca, project director Bianca Elena Moldovan - project value 450,000, Project duration: 2022-2024

17. PN-III-P1-1.1-TE-2021-0244, *Ketoconazole: from foundations to new antifungal formulations based on PAMAM dendrimers with improved bioavailability* TE 122/2022- within INCDTIM, Cluj-Napoca, project director Flavia Martin, value project 450,000, Project duration: 2022-2024.

National patent application

1. A00171/11.04.2024: *Functionalized magnetic nanostructures for transport/drug delivery*, authors: Ioana Baldea¹, Anca Petran^{2,1}, Cristian Iacovitã¹, ¹UMF Cluj, Romania, ²INCDTIM Cluj, Romania
 2. A00385/2.07.2023 "*Supramolecular complex Ketoconazole-PAMAM-G5-NH2 for topical administration*", authors: F. A. Martin¹, I. Bâldea^{1,2}, M. O. Miclăuș¹, I. G. Grosu¹, I. E. Kacso¹, A. C. Moț^{1,3} / ¹INCDTIM Cluj, Romania, ²UMF Cluj, Romania, ³UBB Cluj, Romania

Awards

1. **Third prize** at the National Conference of the Romanian Society for Physiological Sciences, 2009, Craiova
2. **First prize** of the Romanian Society for Physiological Sciences, at the International Annual Conference of the Romanian Society for Biochemistry and Molecular Biology, 2014, Oradea
3. Prizes of the University of Medicine and Pharmacy *Iuliu Hatieganu* poster presentations, Fundamental Sciences section: **II**- 2010, **I**-2015, **I**-2017, **II**-2018, **II**-2023
4. The University of Medicine and Pharmacy *Iuliu Hatieganu* prize for the article with the highest impact factor in 2015, of the Fundamental Sciences section -coauthor
5. The University of Medicine and Pharmacy *Iuliu Hatieganu* Victor Papilian prize for the scientific activity, Fundamental Sciences section, **2021**
6. *Gold Medal*- for the patent application *Functionalized magnetic nanostructures for transport/drug delivery* at International Innovation and Invention Show Europolitechnicus, Bucharest, 2024

CNCSIS – **national prize** for research for 20 articles

List of publications

Books and book chapters - scientific

1. Book chapter: Baldea I (2011). Melanocyte Pygmentation – Friend or Foe on the Route to Melanoma, Breakthroughs in Melanoma Research, Dr Yohei Tanaka (Ed.), ISBN: 978-953-307-291-3, InTech, DOI: 10.5772/20157. Available from: <http://www.intechopen.com/books/breakthroughs-in-melanoma-research/melanocyte-pygmentation-friend-or-foe-on-the-route-to-melanoma>

2. Book chapter: Baldea I, Nenu I, Tudor D, **Filip A**, Advances of immunotherapy in melanoma – where do we stand? In Recent Advances in Skin Cancer, Avidscience Ed; first published February 12, 2016: 2-42, www.avidscience.com

3. Chapter: Baldea I, Filip A, In vitro testing of the biocompatibility of dental biomaterials, in Research in dental medicine, from fundamental studies to applied fields, Ed Colorama, Cluj-Napoca, 2015, ISBN 978-606-93891-6-4

Books and book chapters for educational purposes

1. Book-coordinator Baldea I, Filip A G, Tudor D, Elementary Physiology Notes, "Iuliu Hatieganu" Medical University Ed, "Iuliu Hatieganu" 2018, ISBN 978-973-693-856-6.

2. Physiology Practical works, coord Orasan R, "Iuliu Hatieganu" Medical University Ed, 2016, ISBN 978-973-693-658-6

3. Clichici S, Crivii C, Filip A, Suciu S, Biology: Tests for admission for the Faculty of General Medicine and Dental

- Medicine, 14th Ed, revised, Cluj-Napoca. "Iuliu Hatieganu" University Medical Ed., 2025, ISBN 978-606-075-318-6
4. Login C, Clichici S, Crivii C, Filip A, Suciuc S, Bojita M, Crisan O, Leonte D, Oprean L, Tiperciuc B, Biology and Organic Chemistry, Admission Tests for Pharmacy Faculty, Cluj-Napoca. "Iuliu Hatieganu" University Medical Ed., 2025, ISBN 978-606-075-316-2
 5. Clichici S, Crivii C, Filip A, Suciuc S, Biology Admission Tests for the Faculties of Nursing, Balneo-kineto-therapy and Medical Recuperation, Radiology and Medical Imagistics, Dental Technique, Dietetic Nutrition, Medical Cosmetics and Cosmetic product Technology, Cluj-Napoca. "Iuliu Hatieganu" University Medical Ed., 2024, ISBN 978-606-075- 234-9
 6. Crivii C, Muresan A, Szabo B, Orasan R, Bartoş D, Clichici S. Biology: Tests for admission, 14th Ed, revised, Cluj-Napoca. "Iuliu Hatieganu" University Medical Ed., 2022, ISBN 978-606-075-043-7
 7. Crivii C, Muresan A, Szabo B, et al, Biology: Tests for Admission, 13th Ed, revised, Cluj-Napoca. "Iuliu Hatieganu" University Medical Ed., 2021, ISBN 978-973-693-985-3
 8. Opincariu I, Muresan A, Szabo B, et al. Biology: Admission Tests, 12th Ed, revised, Cluj-Napoca. "Iuliu Hatieganu" University Medical Ed., 2020, ISBN 978-973-693-934-1
 9. Opincariu I, Muresan A, Szabo B, et al. Biology: Tests for Admission 11th Ed, revised, Cluj-Napoca. "Iuliu Hatieganu" University Medical Ed., 2019, ISBN 978-973-693-879-5
 10. Opincariu I, Muresan A, Szabo B, et al. Biology: Tests for Admission, 10th Ed, revised, Cluj-Napoca: "Iuliu Hatieganu" University Medical Ed., 2018, ISBN 978-973-693-809-2.

ISI indexed papers

1. M Susan, I Baldea, S Senila, V Macovei, S Dreve, R M Ion, R Cosgarea. Photodamaging effects of porphyrins and chitosan on primary human keratinocytes and carcinoma cell cultures, *Int J Dermatol*, 2011; 50 (1)280-286 <https://doi.org/10.1111/j.1365-4632.2010.04700.x>
2. Filip A, Daicoviciu D, Clichici S, Bolfa P, Catoi C, **Baldea I**, Bolojan L, Olteanu D, Muresan A, Postescu ID, *The effects of grape seeds polyphenols on SKH-1 mice skin irradiated with multiple doses of UV-B*, *J. Photochem. J. Photobiol. B: Biol.* 133-142, 105, 2011. (Q2, IF=2,89)
3. Filip A, Clichici S, Daicoviciu D, Catoi C, Bolfa P, Postescu ID, Gal A, **Baldea I**, Gherman C, Muresan A. *Chemopreventive effects of Calluna Vulgaris and Vitis Vinifera extracts on UVB-induced skin damage in SKH-1 hairless mice*, *J Physiol Pharmacol*, 62 (3), 385-92, 2011. (Q2, IF=2,72)
4. **Baldea I**, Filip AG. *Photodynamic therapy in melanoma – an update*, *J Physiol Pharmacol*, 63, 2, 109-118, 2012. (Q2, IF=2,72)
5. Porojan D, **Baldea I**, Achim M, Cosgarea R. Phenytoin induces in vitro melanocyte proliferation. *Int J Dermatol*, 51, 1379–1384, 2012; (Q3, IF= 1.342)
6. Moldovan M, Filip A, Prejmorean C, Prodan D, Alb C, Pop A, **Baldea I**. Testing endodontic sealers on human umbilical vein endothelial cells. *Cent Eur J Med*, August 2013, Volume 8, Issue 4, pp 523–529, 10.2478/s11536-013-0171-8, 2013; (Q4, IF=0,26)
7. **Baldea I**, Costin G-E, Shellman Y, Kechris K, Olteanu E D, Filip A, Cosgarea M R, Norris D A, Birlea S A, *Biphasic pro-melanogenic and pro-apoptotic effects of all-trans- retinoic acid (ATRA) on human melanocytes: Time-course study.* *J Dermatol. Sci.* 2013 Nov; 72(2):168-176. (Q1, IF=3,53)
8. Olteanu D, **Baldea I**, Clichici S, Bolfa P, Cenariu M, Schrepler-Perde M, Alupei M, Muresan A, Filip A. *In vitro studies on the mechanisms involved in chemoprevention using Calluna vulgaris on vascular endothelial cells exposed to UVB.* *J Photochem Photobiol B.* 2014 Jul 5;136:54-61, (Q2, IF=2,89)
9. **Baldea I**, Olteanu D E, Bolfa P, Ion R M, Decea N, Cenariu M, Banciu M, Sesarman A V, Filip A G. Efficiency of photodynamic therapy on WM35 melanoma with new synthetic porphyrins: role of chemical structure, intracellular targeting and antioxidant defense, *J Photochem Photobiol B.* 2015; 151:142-152, (Q2, IF=2,89)
10. Nenu I, Tudor D, Filip AG, **Baldea I**. Current position of TNF- α in melanomagenesis. *Tumor Biol.* 2015 Aug; 36(9):6589-602. DOI 10.1007/s13277-015-3639-0 (Q2, IF= 3,6)

11. Filip A, Potara M, Florea A, Baldea I, Olteanu D, Bolfa P, Clichici S, David L, Moldovan B, Olenic L, Astilean S. Comparative evaluation by scanning confocal Raman spectroscopy and transmission electron microscopy of therapeutic effects of noble metal nanoparticles in experimental acute inflammation. *RSC Adv.*, 2015,5, 67435-67448, (Q1, IF =3,289)
12. Olteanu D, Filip A, Socaci C, Biris A R, Filip X, Coros M, Rosu M C, Pogacean F, Alb C, Baldea I, Bolfa Pompei, Pruneanu Stela, Cytotoxicity assessment of graphene-based nanomaterials on human dental follicle stem cells. *Colloids and Surfaces B- Biointerfaces* 2015, 136:791-798. DOI:10.1016/j.colsurfb.2015.10.023, (Q1, IF=3.902)
13. **Baldea I,** Olteanu D E, Bolfa P, Tabaran F, Ion R M, Filip G A Melanogenesis and DNA damage following photodynamic therapy in melanoma with two meso-substituted porphyrins *J Photochem & Photobiol, B: Biology* 161 (2016): 402–410, (Q2, IF=2,89)
14. Lazar M-A, Rotaru H, **Bâldea I,** Bosca A B, Berce C, Prejmerean C, Prodan D, Câmpian, R S. Evaluation of the Biocompatibility of New Fiber-Reinforced Composite Materials for Craniofacial Bone Reconstruction, *Journal of Craniofacial Surgery.* 2016; (27)7: 1694–1699, DOI: 10.1097/SCS.0000000000002925 (Q3, IF=1.592)
15. Sevastre B, Sarpataki O, Stan (Lucaciu) R L, Taulescu M, Sevastre-Berghian A C, Olah N K, Furtuna F, Hanganu D, Hanganu A C, Cenariu M, **Baldea I,** Anticancer activity of *Euonymus Europaeus* fruit extract on human melanoma cells, *Revista Farmacia*, 65 (1), 2017, (Q4, **IF=1,005**)
16. 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*, 2017:(79) 720–727, <https://doi.org/10.1016/j.msec.2017.05.122>, (Q2, IF=3.420)
17. A Petran, T Radu, A Nan, D Olteanu, A Filip, S Clichici, **I Baldea,** M Suciuc, R Turcu, Synthesis, characterization, and cytotoxicity evaluation of high-magnetization multifunctional nanoclusters, *J Nanopart Res* 2017:19 (10) , DOI 10.1007/s11051-016-3685-6, (Q3, IF:1,91)
18. D Tudor, I Nenu, G A Filip, D Olteanu, M Cenariu, F Tabaran, R M Ion, L Gligor, **I Baldea,** Combined regimen of photodynamic therapy mediated by Gallium phthalocyanine chloride and Metformin enhances anti-melanoma efficacy, *PLOS ONE*, 12 (3):1-23, 2017; DOI:10.1371/journal.pone.0173241, (Q1, IF=3.54)
19. A C. Sevastre-Berghian, V Făgărășan, V A. Toma, **I Bâldea,** D Olteanu, R Moldovan, N Decea, G A. Filip, S V. Clichici, Curcumin Reverses the Diazepam-Induced Cognitive Impairment by Modulation of Oxidative Stress and ERK 1/2/NF-κB Pathway in Brain. *Oxidative Medicine and Cellular Longevity.* (2017), Article ID 3037876, <https://doi.org/10.1155/2017/3037876>, (Q2, IF=4.937)
20. Dănilă O-O, Sevastre Berghian A, Dionisie V, Gheban D, Olteanu D, Tabaran F, **Baldea I,** Katona G, Moldovan B, Clichici S, David L, Filip G A. The effects of silver nanoparticles on behavior, apoptosis and nitro-oxidative stress in offspring Wistar rats, *Nanomedicine* 2017, Vol. 12, No. 12; 1455–1473, <https://doi.org/10.2217/nmm-2017-0029> (Q1, IF=5.005)
21. D R Mitrea, S Clichici, A Filip, D Olteanu, **I Baldea,** R Moldovan, N Decea, O A Hoteiuc, Resveratrol and loratadine effects on oxidative stress induced by experimental inflammation, *Studia Universitatis Babeș-Bolyai, Chemia*, 2017; 62(1):89-100; DOI:10.24193/subbchem.2017.1.07
22. Baldea I, Olteanu D E, Filip G A, Cenariu M, Ducea D, Tofan A, Alb C, Moldovan M. Toxicity and efficiency study of plant extracts-based bleaching agents, *Clinical Oral Investigations* May 2017, Volume 21, Issue 4, pp 1315–1326 in *WSCC* din 2018: 1-12, (Q2 IF=2.207)
23. **Baldea I,** Teacoe I, Olteanu D E, Vaida-Voievod C, Clichici A, Sirbu A, Filip G A, Clichici S, Effects of different hypoxia degrees on endothelial cell cultures—Time course study, *Mechanisms of ageing and development* 2018; (172): 45-50. *Mechanisms of Ageing and Development.* <https://doi.org/10.1016/j.mad.2017.11.003>, (Q1, IF=3.05)
24. A Saplontai-Pop, M Moldovan, M Filip, R Oprean, C Ionescu, V Lazar Leordean, O Orasan, **I Baldea,** Thiosulfinate Compounds from Allium cepa Extracts: Chromatographic Identification and Biocompatibility Testing, *Chemistry of Natural Compounds*, 2017;53 (5) 1012-1014, <https://link.springer.com/journal/10600> (Q4, IF=0.45).

25. A Pallag, G A Filip, D Olteanu, S Clichici, **I Baldea**, T Jurca, O Micle, L Vicaș, E Marian, O Sorițău, M Cenariu, M Mureșan. Equisetum arvense L. Extract Induces Antibacterial Activity and Modulates Oxidative Stress, Inflammation, and Apoptosis in Endothelial Vascular Cells Exposed to Hyperosmotic Stress, *Oxidative medicine and cellular longevity*, 2018, Article ID 3060525, 14 pages, <https://doi.org/10.1155/2018/3060525>, (Q2, IF=4.937)
26. Anca S Mesaros, C Romanec, M Mesaros, M Moldovan, **I Baldea**, In vitro Testing of Experimental and Commercial Bracket Bonding Materials, *Materiale Plastice* 2017; 54 (4): 620-625, site <http://www.revmaterialeplastice.ro> (Q4, FI=0.46)
27. A S Dănescu, **I Bâldea**, D C Leucuța, I Lupan, G Samașca, C Sitaru, R Chiorean, A Baican, Immunological markers as predictors of developing steroid-induced diabetes mellitus in pemphigus vulgaris patients: An observational study, *Medicine* 2018; 97(17) e0463, doi: [[10.1097/MD.00000000000010463](https://doi.org/10.1097/MD.00000000000010463)], (Q2, IF 2.028)
28. **I Baldea**, L Giurgiu, I D Teacoe, DE Olteanu, FC Olteanu, S Clichici, GA Filip,, Photodynamic Therapy in Melanoma-Where do we stand?, *Curr Med Chem*, 2018, 21 01 2019; vol 25: 1-23, DOI: [10.2174/0929867325666171226115626](https://doi.org/10.2174/0929867325666171226115626), (Q1, IF=3.469)
29. T Jurca, **I Baldea**, GA Filip, D Olteanu, S Clichici, A Pallag, L Vicas, E Marian, O Micle, M Muresan, The effect of Tropaeolum majus L. on bacterial infections and in vitro efficacy on apoptosis and DNA lesions in hyperosmotic stress, *J Physiol Pharmacol* 2018; 69 (3):391-401, DOI: 10.26402/jpp.2018.3.06, (Q3, IF=2.478)
30. A.C. Sevastre-Berghian, V.A. Toma, B. Sevastre, D. Hanganu, L. Vlase, D. Benedec, I. Oniga, **I. Baldea**, D. Olteanu, R. Moldovan, N. Decea, G.A. Filip, S.V. Clichici. Characterization and biological effects of Hypericum extracts on experimentally-induced – anxiety, oxidative stress and inflammation in rats, *J Physiol Pharmacol* 2018; 69, 5, www.jpp.krakow.pl | DOI: 10.26402/jpp.2018.5.xx , (Q3, IF=2.478)
31. R Opris, V Toma, D Olteanu, **I Baldea**, A M 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, 26 pages, DOI:10.2217/nmm-2018-0193 (Q1, IF=4,717)
32. C Bacali, M Badea, M Moldovan, C Sarosi, V Nastase, **I Baldea**, R S Chiorean, M Constantiniuc, [The Influence of Graphene in Improvement of Physico-Mechanical Properties in PMMA Denture Base Resins](https://doi.org/10.3390/ma12142335), *Materials*, 2019;12(14): 23-35 (Q2, IF=2.972) <https://doi.org/10.3390/ma12142335>
33. 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](https://doi.org/10.1016/j.jphotobiol.2018.12.006) *J Photochem Photobiol B: Biology* **Volume 191**, 2019, 26-37 <https://doi.org/10.1016/j.jphotobiol.2018.12.006>, (Q1, IF= 4.383)
34. C C Login, **I Bâldea**, B Tiperciuc, D Benedec, D C Vodnar, N Decea, Ș Suciuc. [A Novel Thiazolyl Schiff Base: Antibacterial and Antifungal Effects and In Vitro Oxidative Stress Modulation on Human Endothelial Cells](https://doi.org/10.1155/2019/1607903). *Oxidative Medicine and Cellular Longevity*, 2019, Volume 2019, Article ID 1607903, 11 pages, <https://doi.org/10.1155/2019/1607903> (Q2, IF=4,868)
35. Bacali C, **I Baldea**, M Moldovan, R Carpa, D E Olteanu, G A Filip, V Nastase, L Lascu, M Badea, M Constantiniuc, F Badea, Flexural strength, biocompatibility, and antimicrobial activity of a polymethyl methacrylate denture resin enhanced with graphene and silver nanoparticles, *Clinical Oral Investigations* 2020; **24**, 2713–2725, <https://doi.org/10.1007/s00784-019-03133-2>, (Q1, IF =2,812)
36. **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, DOI:10.2217/nmm-2019-0290 (Q1, IF=4,3)
37. L Colceriu Burtea , C Prejmerean, D Prodan , **I Baldea** , M Vlassa, M Filip, M Moldovan, M-A Lazar (Moldovan), A Antoniac, V Prejmerean and I Ambrosie. New Pre-reacted Glass Containing Dental Composites (giomers) with Improved Fluoride Release and Biocompatibility, *Materials*, 2019, 12, 4021; doi:10.3390/ma12234021 (Q2, IF=3,057)

38. T.Radu, A.Petran, D.Olteanu, **I. Baldea**, M.Potara, R.Turcu. Evaluation of physico-chemical properties and biocompatibility of new surface functionalized Fe₃O₄ clusters of nanoparticles, [Applied Surface Science, Volume 501](https://doi.org/10.1016/j.apsusc.2019.144267), 2020, 144267, <https://doi.org/10.1016/j.apsusc.2019.144267> (Q1, IF=6,182)
39. **I Baldea**, D Olteanu, G A Filip, F Pogacean, M Coros, M Suci, S C Tripon, M Cenariu, L Magerusan, R-I Stefan-van Staden, S Pruneanu, Cytotoxicity mechanisms of nitrogen-doped graphene obtained by electrochemical exfoliation of graphite rods, on human endothelial and colon cancer cells, [Carbon](https://doi.org/10.1016/j.carbon.2019.12.011), 2020,158:267- 281 <https://doi.org/10.1016/j.carbon.2019.12.011> (Q1, IF=8,821)
40. Tudor DV, **Baldea I**, Lupu M, Kacsó T, Kutasi E, Hopartean A, et al. COX-2 as a potential biomarker and therapeutic target in melanoma. *Cancer Biol Med.* 2020; 17: 20-31. doi: 10.20892/j.issn.2095-3941.2019.0339, (Q1, IF=4,467)
41. 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 NFκB/pNFκB expressions in experimental inflammation in Wistar rats](https://doi.org/10.1016/j.msec.2020.110709) *Materials Science and Engineering: C.* 2020; 110:110709(39), DOI: <https://doi.org/10.1016/j.msec.2020.110709> (Q1, IF=5,88)
42. I-P Laszló, M R Laszló, V Toma, **I Baldea**, D Olteanu, L David, B Moldovan, R M Ion, R Moldovan, G A Filip, G Kacsó, C Cainap, S Clichici, A Muresan, [The in vivo modulatory effects of Cornus mas extract on photodynamic therapy in experimental tumors](https://doi.org/10.1016/j.pdpdt.2020.101656), *Photodiagnosis and Photodynamic Therapy.*2020; 101656 DOI: <https://doi.org/10.1016/j.pdpdt.2020.101656> (Q3, IF=2,589)
43. F Martin, M Pop, I Kacsó, I G Grosu, M Miclaus, D Vodnar, I Lung, G A Filip, E D Olteanu, R Moldovan, A Nagy, X Filip, **I Bâldea**, [Ketoconazole-p-aminobenzoic Acid Cocrystal: Revival of an Old Drug by Crystal Engineering](https://doi.org/10.1021/acs.molpharmaceut.9b01178), *Molecular Pharmaceutics*, 2020; 17 (3): 919-932, DOI: <https://doi.org/10.1021/acs.molpharmaceut.9b01178> (Q1, IF=4,321)
44. 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 cholestasis](https://doi.org/10.1016/j.msec.2020.111117), *Materials Science and Engineering: C* 2020/5/25 Pages 111-117 DOI: <https://doi.org/10.1016/j.msec.2020.111117> (Q1, IF=5.88)
45. T Jurca, **I Baldea**, G A Filip, D Olteanu, S Clichici, A Pallag, L Vicaș, E Marian, O Micle, C B Crivii, and M Mureșan. A Phytocomplex Consisting of *Tropaeolum majus* L. and *Salvia officinalis* L. Extracts Alleviates the Inflammatory Response of Dermal Fibroblasts to Bacterial Lipopolysaccharides. [Oxidative Medicine and Cellular Longevity](https://doi.org/10.1155/2020/8516153) / 2020 /Volume 2020 |Article ID 8516153 | 14 pages | <https://doi.org/10.1155/2020/8516153> (Q2, IF=5,05)
46. DR Mitrea, R Malkey, TL Florian, A Filip, S Clichici, C Bidian, R Moldovan, OA Hoteiuc, AM Toader, **I Baldea** [Daily oral administration of chlorogenic acid prevents the experimental carrageenan-induced oxidative stress](https://doi.org/10.1155/2020/8516153) *J Physiol Pharmacol*, 2020, 71(1):57-67 (Q2, IF=2,544)
47. L M Dascalu (Rusu), M Moldovan, D Prodan, I Ciotlaus, V Popescu, **I Baldea**, R Carpa, S Sava, R Chifor, and M E Badea. Assessment and Characterization of Some New Photosensitizers for Antimicrobial Photodynamic Therapy(aPDT) *Materials*,2020,13, 3012; doi:10.3390/ma13133012 (Q2, IF=2.972)
48. M Bonea, G A Filip, V A Toma, **I Baldea**, A Sevastre Berghian, N Decea, D Olteanu, R Moldovan, C Crivii, R C Vinași, I V Micluția. The Modulatory Effect of Metformin on Ethanol-Induced Anxiety, Redox Imbalance, and Extracellular Matrix Levels in the Brains of Wistar Rats. *J Mol Neuroscience*, 2020, 19 pages, <https://doi.org/10.1007/s12031-020-01593-w> (Q3, IF=2,496)
49. Vicas LG, Jurca T, Baldea I, Filip GA, Olteanu D, Clichici SV, Pallag A, Marian E, Micle O, Crivii CB, et al. *Physalis alkekengi* L. Extract Reduces the Oxidative Stress, Inflammation and Apoptosis in Endothelial Vascular Cells Exposed to Hyperglycemia. *Molecules.* 2020; 25(16):3747. <https://doi.org/10.3390/molecules25163747>
50. A Craciun, **I Bâldea**, A Ispas, M E Badea, I Petean, C Sarosi, M Moldovan, S Cuc, R Ene, M Crișan Evaluation of Surface Characteristics and Cytotoxicity of Dental Composites. *Coatings* 2020,10, 749; doi:10.3390/coatings10080749, 14 pages (Q2, IF=2,175)

51. EM Domsa, GA Filip, D Olteanu, **I Baldea**, S Clichici, A Muresan, L David, B Moldovan, I Para, M Suciuc, M Achim, V Negrean, V Andreica, [Gold nanoparticles phytoreduced with Cornus mas extract mitigate some of gliadin effects on Caco-2 cells.](#) J Physiol Pharmacol, 2020, 71(2), 12 pages (Q2, IF=2,644)
DOI:<https://doi.org/10.26402/jpp.2020.2.04>
52. Sevastre-Berghian, A.C., Ielciu, I., Mitre, A.O., Filip, G.A., Oniga, I., Vlase, L., Benedec, D., Gheldiu, A.-M., Toma, V.A., Mihart, B., Mihaș, A., **Bâldea, I.**, Olteanu, D., Chis, I.C., Clichici, S.V., Hanganu, D. Targeting Oxidative Stress Reduction and Inhibition of HDAC1, MECP2, and NF-kB Pathways in Rats With Experimentally Induced Hyperglycemia by Administration of Thymus marshallianus Willd. Extracts Frontiers in Pharmacology, Volume 11, 23 September 2020, Article number 581470 (Q1, IF=3,860)
53. 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, 2021: 123 (4) pages 111974, (Q1,IF=5,88)
54. C Bidian, G A Filip, L David, A Florea, B Moldovan, D Popa Robu, D Olteanu, T Radu, S Clichici, DR Mitrea, I Baldea, [The impact of silver nanoparticles phytosynthesized with Viburnum opulus L. extract on the ultrastructure and cell death in the testis of offspring rats](#), Food and Chem Toxicol, 2021: 150(4) Pages 112053, <https://doi.org/10.1016/j.fct.2021.112053> (Q1, IF=4,6)
55. D V Tudor, **I Bâldea**, D E Olteanu, E Fischer-Fodor, P Virag, M Lupu, T Călinici, R M Decea, G A Filip. [Celecoxib as a Valuable Adjuvant in Cutaneous Melanoma Treated with Trametinib](#) International Journal of Molecular Sciences, 2021: 22(9): 4387, <https://doi.org/10.3390/ijms22094387> (Q1, IF=4,556)
56. CN Tiboc Schnell, Gabriela Adriana Filip, N Decea, R Moldovan, R Opris, SC Man, B Moldovan, L David, F Tabaran, D Olteanu, AM 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: 1-17 <https://doi.org/10.1007/s10787-021-00805-y> (Q1, IF=3,45)
57. S Danescu, G A Filip, R Moldovan, D Olteanu, A Nagy, X Filip, F Martin, I Kacso, I Baldea [Ketoconazole-p aminobenzoic cocystal, an improved antimycotic drug formulation, does not induce skin sensitization on the skin of BALBc mice](#) Inflammopharmacology 2021: 1-13, DOI: <https://doi.org/10.1007/s10787-021-00834-7>(Q1, IF=3,45)
58. C Bacali, R Carpa, S Buduru, M L Moldovan, I Baldea, A Constantin, M Moldovan, D Prodan, O Lucaciu, F Catoi, M Constantiniuc, M Badea, [Association of Graphene Silver Polymethyl Methacrylate \(PMMA\) with Photodynamic Therapy for Inactivation of Halitosis Responsible Bacteria in Denture Wearers](#), Nanomaterials, 2021: 11(7), 1643 <https://doi.org/10.3390/nano11071643> (Q1, IF=3,05)
59. Mureșan, M.; Olteanu, D.; Filip, G.A.; Clichici, S.; Baldea, I.; Jurca, T.; Pallag, A.; Marian, E.; Frum, A.; Gligor, F.G.; et al. Comparative Study of the Pharmacological Properties and Biological Effects of Polygonum aviculare L. herba Extract-Entrapped Liposomes versus Quercetin-Entrapped Liposomes on Doxorubicin-Induced Toxicity on HUVECs. Pharmaceutics 2021, 13, 1418. <https://doi.org/10.3390/pharmaceutics13091418> (Q1, IF=5.4)
60. V Dionisie, A M Ciobanu, V A Toma, M C Manea, I Baldea, D Olteanu, A Sevastre-Berghian, S Clichici, M Manea, S Riga, G A Filip, [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](#) 2021/1, IJMS, vol 22 (14):7483 (Q1, FI-5.6)
61. I Ielciu, G A Filip, I Oniga, N-K Olah, I Bâldea, et al [Oxidative Stress and DNA Lesion Reduction of a Polyphenolic Enriched Extract of Thymus marschallianus Willd. in Endothelial Vascular Cells Exposed to Hyperglycemia](#), Plants, 2021/12, vol 10(12) pages 2810 <https://doi.org/10.3390/plants10122810> (Q2, IF=4.5)
62. A C Sevastre-Berghian, V A Toma, B Sevastre, D Benedec, I Oniga, L Filip, I Baldea, S Suciuc, C P Popovici, R L Lucaciu, N Decea, S V Clichici, I Ielciu, G A Filip, D Hanganu. [Hypericum Sp. Extracts Improve Anxiety-Like Behaviour And Influence Cerebral Hmox1 Expression In A Rat Model Of Fg-7142-Induced Anxiety.](#) Farmacia.2021; 69(6)1080-1088

63. Sevastre-Berghian, A.C., Casandra, C., Gheban, D. *et al.* Neurotoxicity of Bisphenol A and the Impact of Melatonin Administration on Oxidative Stress, ERK/NF- κ B Signaling Pathway, and Behavior in Rats. *Neurotox Res* **40**, 1882–1894 (2022). <https://doi.org/10.1007/s12640-022-00618-z> (Q2, IF=2.9)
64. C Bidian, G A Filip, L David, B Moldovan, I Baldea, D Olteanu, M Filip, P Bolfa, M Potara, A M Toader & S Clichici (2022) *Viburnum opulus* fruit extract-capped gold nanoparticles attenuated oxidative stress and acute inflammation in carrageenan-induced paw edema model, *Green Chemistry Letters and Reviews*, 15:2, 320-336, DOI: [10.1080/17518253.2022.2061872](https://doi.org/10.1080/17518253.2022.2061872) (Q1, IF=6.016)
65. Clichici A, Filip GA, Achim M, Baldea I, Cristea C, Melinte G, Pana O, Tudoran LB, Ducea D, Stefan R. Characterization and In Vitro Biocompatibility of Two New Bioglasses for Application in Dental Medicine—A Preliminary Study. *Materials*. 2022; 15(24):9060. <https://doi.org/10.3390/ma15249060>
66. Dulf, P.L., Mocan, M., Coadă, C.A. D V Dulf, R Moldovan, I Baldea, A-D Farcas, D Blendea, A G Filip Doxorubicin-induced acute cardiotoxicity is associated with increased oxidative stress, autophagy, and inflammation in a murine model. *Naunyn-Schmiedeberg's Arch Pharmacol* (2023) <https://doi.org/10.1007/s00210-023-02382-z> (Q2, IF=3.6)
64. I Baldea, A Petran, A Florea, A Sevastre-Berghian, I Nenu, G A Filip, M Cenariu, M T Radu, C Iacovita,, Magnetic Nanoclusters Stabilized with Poly[3,4-Dihydroxybenzhydrazide] as Efficient Therapeutic Agents for Cancer Cells Destruction *Nanomaterials* **2023**, 13(5), 933; <https://doi.org/10.3390/nano13050933> (Q1, IF=7.4)
65. **Baldea, I.**; Danescu, S.; Tabaran, F.; Filip, A.G.; Ion, R.M.; Olteanu, D.E.; Sevastre-Berghian, A.C.; Decea, R.M.; Iacovita, C.; Hanganu, D.; Cenariu, M. Inhibition of Survival Mechanisms and Cell Death Induction in Melanoma Following Photodynamic Therapy Mediated by Meso-5,10,15,20-tetrakis-(4-hydroxyphenyl)-porphyrin. *Processes* **2023**, 11, 917. <https://doi.org/10.3390/pr11030917> (Q2, IF=3.352)
66. C Bidian, G A Filip, L David, B Moldovan, D Olteanu, S Clichici, M-C Olănescu-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](https://doi.org/10.3390/nano13071251) *Nanomaterials* 2023 (13): 7, 1251 DOI: <https://doi.org/10.3390/nano13071251> (Q1, IF=7.4)
67. Florea, C.M., Baldea, I., Rosu, R. *et al.* The Acute Effect of Trimethylamine-N-Oxide on Vascular Function, Oxidative Stress, and Inflammation in Rat Aortic Rings. *Cardiovasc Toxicol* **23**, 198–206 (2023). <https://doi.org/10.1007/s12012-023-09794-6> (Q2, IF=3.2)
68. M Lupu, C A Coadă, D-V Tudor, I Baldea, A Florea, V-A Toma, A Lupsor, R Moldovan, N Decea, G A Filip, Iron chelation alleviates multiple pathophysiological pathways in a rat model of cardiac pressure overload, *Free Radical Biology and Medicine*, 2023 (200):1-10, <https://doi.org/10.1016/j.freeradbiomed.2023.02.018>. (Q1, IF=7.4)
69. Scrob T, Filip GA, Baldea I, Varodi SM, Cimpoiu C. Sweeteners' Influence on In Vitro α -Glucosidase Inhibitory Activity, Cytotoxicity, Stability and In Vivo Bioavailability of the Anthocyanins from Lingonberry Jams. *Foods*. 2023; 12(13):2569. <https://doi.org/10.3390/foods12132569>(Q1, IF=5,1)
70. A Păun, L M Rusu, M Moldovan, S Sava, A Dreanca, C Bacali, M E Badea, C Borzan, I Bâldea. The Antioxidant Effect and Chemical Composition of two Experimental Photosensitizers in Induced Periodontitis. *Studia UBB Chemia*, LXVIII, 2, 2023 (p. 85-97) DOI:10.24193/subbchem.2023.2.06 (Q4, IF=0.5)
71. David, L.; Morosan, V.; Moldovan, B.; Filip, G.A.; **Baldea, I.** 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, <https://doi.org/10.3390/antiox12081489>
72. Filip, M.; **Baldea, I.**; David, L.; Moldovan, B.; Flontas, G.C.; Macavei, S.; Muntean, D.M.; Decea, N.; Tigu, A.B.; Clichici, S.V. 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, 1271. <https://doi.org/10.3390/biom13081271> (Q1, IF=4.8)

73. [Kacso, I](#), [Bâldea, I](#), [Miclăuș, M](#), [Moț, A](#), [Moldovan, R](#), [Martin, F](#). Ketoconazole-Pamam Dendrimer Supramolecular Complex For Prolonged Delivery By In Vitro And In Vivo Studies. [Studia Universitatis Babeș-Bolyai, *Chemia*, 2023, Vol 68, Issue 4, p137](#) DOI: [10.24193/subbchem.2023.4.10](#) (Q4, IF=0.5)
74. [Bâldea, I](#); Lung, I; Opris, O; Stegarescu, A; Kacso, I; Soran, ML . Antioxidant, Anti-Inflammatory Effects and Ability to Stimulate Wound Healing of a Common-Plantain Extract in Alginate Gel Formulations, *Gels*, 9 (11) Article number 901, 2023, (Q1) DOI: [10.3390/gels9110901](#) (Q1, IF=4.6)
75. C M Florea, R Rosu, R Moldovan, L Vlase, V Toma, N Decea, I Baldea, G A Filip. [The impact of chronic Trimethylamine N-oxide administration on liver oxidative stress, inflammation, and fibrosis](#). *Food and Chemical Toxicology* 2024;184; 114429, DOI: [https://doi.org/10.1016/j.fct.2023.114429](#)
76. Nenu I, Baldea I, Coadă C A, et al, ***Lactobacillus rhamnosus* probiotic treatment modulates gut and liver inflammatory pathways in a hepatocellular carcinoma murine model. A preliminary study.** [Food and Chemical Toxicology](#), 2024; **183**:114314, DOI: [https://doi.org/10.1016/j.fct.2023.114314](#) (Q1, IF=3.9)
77. Dulf PL, Coadă CA, Florea A, Moldovan R, **Baldea I**, Dulf DV, Blendea D, Filip AG. Mitigating Doxorubicin-Induced Cardiotoxicity through Quercetin Intervention: An Experimental Study in Rats. *Antioxidants*. 2024; 13(9):1068. [https://doi.org/10.3390/antiox13091068](#)(Q1, IF=6)
78. Dulf PL, Coadă CA, Florea A, Moldovan R, **Baldea I**, Dulf DV, Blendea D, David L, Moldovan B, Morosan VI, et al. Doxorubicin Incorporation into Gold Nanoparticles: An In Vivo Study of Its Effects on Cardiac Tissue in Rats. *Nanomaterials*. 2024; 14(20):1647. [https://doi.org/10.3390/nano14201647](#) (Q2, IF=4.4)
79. **Baldea I**, Moldovan R, Nagy A-L, Bolfa P, Decea R, Miclaus MO, Lung I, Gherman AMR, Sevastre-Berghian A, Martin FA, et al. Ketoconazole-Fumaric Acid Pharmaceutical Cocrystal: From Formulation Design for Bioavailability Improvement to Biocompatibility Testing and Antifungal Efficacy Evaluation. *International Journal of Molecular Sciences*. 2024; 25(24):13346. [https://doi.org/10.3390/ijms252413346](#) (Q1, IF=4.9)
80. Mormile C, Opriș O, Bellucci S, Lung I, Kacso I, Turza A, Stegarescu A, Tripon S, Soran M-L, **Bâldea I**. Natrium Alginate and Graphene Nanoplatelets-Based Efficient Material for Resveratrol Delivery. *Gels*. 2025; 11(1):15. [https://doi.org/10.3390/gels11010015](#)
81. Ielciu I, Filip GA, Sevastre-Berghian AC, **Bâldea I**, Olah NK, Burtescu RF, Toma VA, Moldovan R, Oniga I, Hanganu D. Effects of a *Rosmarinus officinalis* L. Extract and Rosmarinic Acid in Improving Streptozotocin-Induced Aortic Tissue Damages in Rats. *Nutrients*. 2024 Dec 31;17(1):158. doi: [10.3390/nu17010158](#).
82. **Bâldea I**, Soran M-L, Stegarescu A, Opriș O, Kacso I, Tripon S, Adascalitei A, Fericeș IG, Decea R, Lung I. *Lilium candidum* Extract Loaded in Alginate Hydrogel Beads for Chronic Wound Healing. *Gels*. 2025; 11(1):22. [https://doi.org/10.3390/gels11010022](#)
83. Anca Petran, Maria Suci, Ioana Baldea, Sanda Boca, Ovidiu Pana, Cristian Leostean, Monica Dan, Alexander Bunge, One-pot synthesis and biological assessment of fluorescent magnetite clusters coated with polydopamine and -analogues, *Applied Surface Science*, Volume 711, 2025, 164028, ISSN 0169-4332, [https://doi.org/10.1016/j.apsusc.2025.164028](#).
84. Baldea, I.; Iacoviță, C.; Gurgu, R.A.; Vizitiu, A.S.; Râzniceanu, V.; Mitrea, D.R. Magnetic Hyperthermia with Iron Oxide Nanoparticles: From Toxicity Challenges to Cancer Applications. *Nanomaterials* **2025**, *15*, 1519. [https://doi.org/10.3390/nano15191519](#)
85. Baldea, I.; Grosu, I.G.; Ghafury, S.; Golat, C.; Doubali, D.; Vestemean, A.-M.; Cedorge, A.N.; Florian, I.; Yiannoulatos, M.; Wajahat, M.M.; et al. Biological Models for Evaluating Hydrogel-Based Formulations in Wound Healing. *Gels* **2025**, *11*, 705. [https://doi.org/10.3390/gels11090705](#)
86. Toma, C., Popa, R., Ciobanu, L. *et al.* Overexpression of IL-6 and STAT3 may provide new insights into ovine pulmonary adenocarcinoma development. *BMC Vet Res* **21**, 29 (2025). [https://doi.org/10.1186/s12917-024-04429-6](#)
87. Ana Ribeiro, Catarina Pereira-Leite, Catarina Rosado, Edlira Aruci, Helen E. Colley, Inge Kortekaas Krohn, Ioana Baldea, Ivana Pantelić, Joachim W. Fluhr, Sandra I. Simões, Snežana Savić, Sofia A.

- Costa Lima, Enhancing Transcutaneous Drug Delivery: Advanced Perspectives on Skin Models, JID Innovations, Volume 5, Issue 2, 2025, 100340, ISSN 2667-0267, <https://doi.org/10.1016/j.xjidi.2024.100340>.
88. Dana Alina Magdas, Maria David, Ariana Raluca Hategan, Adriana Filip, Ioana Baldea, Tudor Mihai Magdas, Rare earth elements: Between technological critical elements and emerging contaminants, Journal of Agriculture and Food Research, Volume 21, 2025, 101818, ISSN 2666-1543, <https://doi.org/10.1016/j.jafr.2025.101818>.
89. Boca Antonia, Cosmina Ioana Bondor, Sanda Ileana Cîmpean, Ioana Bâldea, Sebastian Candrea, Aranka Ilea. [Association Between Advanced Glycation End Products And Inflammation In Root Canal Infections: A Cross-Sectional Observational Study](#). 2025/4/1, Romanian Journal of Oral Rehabilitation, Volume 17, Issue 2, DOI : 10.62610/RJOR.2025.2.17.15
90. Marina Daniela Manescu, Bogdan Catalin, Ioana Baldea, Valentin Octavian Mateescu, Gabriela Camelia Rosu, Ianis Kevyn Stefan Boboc, Anca-Maria Istrate-Ofiteru, Ilona Mihaela Liliac, Costin Teodor Streba, Samir Kumar-Singh, Daniel Pirici [Aquaporin 4 modulation drives amyloid burden and cognitive abilities in an APPPS1 mouse model of Alzheimer's disease](#), Alzheimer's & Dementia, 2025/5, Volume 21, Issue 5, Pages e70164, DOI: 10.1002/alz.70164
91. Baldea, I; Grosu, IG; Ghafury, S; Golat, C; Doubali, D; Vestemean, AM; Cedorge, AN; Florian, I; Yiannoulatos, M; Wajahat, MM; Silli, LR; Stavrou, T; Mitrea, DR. Biological Models for Evaluating Hydrogel-Based Formulations in Wound Healing. GELS 2025;11;9:-705 10.3390/gels11090705. doi:WOS:001579986300001.. (FI=5.3; Q1)
92. Baldea, I; Iacovita, C; Gurgu, RA; Vizitiu, AS; Râzniceanu, V; Mitrea, DR. Magnetic Hyperthermia with Iron Oxide Nanoparticles: From Toxicity Challenges to Cancer Applications. NANOMATERIALS 2025;15;19:-1519 10.3390/nano15191519. doi:WOS:001593779000001.. (FI=4.3; Q2)
93. Mitre, AO; Baldea, I; Filip, GA; Pop, RM; Neag, MA; Mitre, B; Negoescu, A; Press, AT; Parvu, AE. [Sodium thiosulfate attenuates liver injury in a rat model of sepsis by modulating ferroptosis and oxidative stress](#). Scientific Reports 2026;16;1:239 10.1038/s41598-025-29462-9 doi:WOS: 001654740200001 (FI=3.9, Q1) Autor correspondent
94. Magdas, TM ; Filip, GA; Dehelean, A; Clichici, S; Bodolea, C; Balan, AM; Magdas, DA; Crivii, CB; Bâldea, I. [Technology-Critical Element Exposure Reveals Divergent Toxicity in Different Human Cells Despite Comparable Uptake](#) Biomolecules 2026; 16;1:113 10.3390/biom16010113 doi:WOS: 001670870800001 (FI=4.8; Q1)
95. Petran, A; Suci, M; Baldea, I; Boca, S; Pana, O; Leostean, C; Dan, MNC; Bunge, A. One-pot synthesis and biological assessment of fluorescent magnetite clusters coated with polydopamine and -analogues. APPLIED SURFACE SCIENCE 2025;711;-164028 10.1016/j.apsusc.2025.164028. doi:WOS:001532744500002.. (FI=6,9; Q1)
96. Clichici A; Ducea, D; Gasparik, C; Coada, CA; Bâldea, I; Cuc, S; Moldovan, M. [Characterization of Newly Synthesized Nanobiomaterials for the Treatment of White Spot Lesions](#) Biomolecules 2026; 16;1:112 10.3390/biom16010112 doi:WOS: 001670768200001 (FI=4.8; Q1)

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