

LISTA DE LUCRĂRI ȘTIINȚIFICE

I. Articole în reviste ISI în calitate de autor principal

1. **Andreea Iren Serban**, M.Costache, A.Dinischiotu. AGEs and glucose levels modulate type I and III procollagen mRNA synthesis in dermal fibroblasts cell culture, *Experimental Diabetes Research*, **2008** (1), 1-7, (2008) IF: 4.350
2. **Andreea Iren Serban**, E. Condac, M. Costache, A. Dinischiotu, The relationship between AGEs, Cu²⁺ and crosslinking of collagen, *Revue Roumaine de Chimie*, 54 (1), 93-101, **2009**. ISSN: 0035-3930. IF:0.25
3. **Andreea Iren Serban**, M.Costache, A.Dinischiotu. Controversial behavior of aminoguanidine in the presence of either reducing sugars or soluble glycated bovine serum albumin, *Carbohydrate Research*, 346 (18), 2872-2880, **2011**. IF:2.074
4. **Andreea Iren Serban**, L.Stanca, OI.Geicu, MC.Munteanu, M. Costache, A.Dinischiotu, Extracellular matrix is modulated in advanced glycation end products milieu via a RAGE receptor dependent pathway boosted by transforming growth factor- β 1, *Journal of Diabetes*, 7(1):114-124. **2015**. Online. ISSN: 1753-0407; IF:3.213
5. **Andreea Iren Șerban**, L. Stanca, O.I. Geicu, A. Dinischiotu, AGEs-induced IL-6 synthesis precedes RAGE up-regulation in HEK 293 cells: an alternative inflammatory mechanism?, *Int. J. Mol. Sci.*, 16(9), 20100-20117, **2015**; IF:3.257
6. **Andreea Iren Serban**, L. Stanca, C. Sima, A.C. Staicu, O. Zarnescu, A. Dinischiotu, Complex responses to Si quantum dots accumulation in carp liver tissue: Beyond oxidative stress, *Chem. Biol. Interact.*, 239, 56-66, **2015**. IF:3.296
7. **Andreea Iren Serban**, Stanca L, Geicu OI, Munteanu MC, Dinischiotu A., RAGE and TGF- β 1 cross-talk regulate extracellular matrix turnover and cytokine synthesis in AGEs exposed fibroblast cells. *PLoS ONE* 11(3): e0152376, **2016**. doi:10.1371/journal.pone.0152376 IF: 3.057
8. **Andreea Iren Șerban**, O. I. Geicu, and F. Serban, Geophysicochemical model of an ionospheric auroral gyroscope, *Earth and Space Science*, 3 (1), 15–33, 2016. doi:10.1002/2015EA000145, **2016**. IF:3.22

9. Geicu O.I., Stanca L, Dinischiotu A, **Șerban A.I.**, Proteomic and immunochemical approaches to understanding the glycation behaviour of the casein and β -lactoglobulin fractions of flavoured drinks under UHT processing conditions, Scientific Reports 10 (1), Article number: 12869, **2018**. IF: 4.122.
10. Geicu O.I., Stanca L, Voicu S.N., Dinischiotu A., Bilteanu L., **Șerban A.I.**, Calu V., (2020) Dietary AGEs involvement in colonic inflammation and cancer: insights from an in vitro enterocyte model, Scientific Reports 8 (1), Article number: 104681, **2020**. IF: 4.122.
11. Pisoschi A.M., Pop A., Gajaila I., Iordache F., Dobre R., Cazimir I., **Șerban A.I.**, Analytical methods applied to the assay of sulfur-containing preserving agents, Microchemical Journal 155 (1), Article number: 2754, **2020**. IF: 3.594.
12. AM Pisoschi, A Pop, F Iordache, L Stanca, G Predoi, **A.I. Șerban**, Oxidative stress mitigation by antioxidants-an overview on their chemistry and influences on health status, Eur. J. Med. Chem. 209, 112891, 2021, IF=6,82
13. L Bilteanu, OI Geicu, L Stanca, AM Pisoschi, F Serban, **A.I. Șerban**, V Calu, Human Eye Optics within a Non-Euclidian Geometrical Approach and Some Implications in Vision Prosthetics Design, Biomolecules 11 (2), 215, 2021, IF=6,06
14. AM Pisoschi, A Pop, F Iordache, L Stanca, L Bilteanu, **A.I. Șerban**, Antioxidant Determination with the Use of Carbon-Based Electrodes, Chemosensors 9 (4), 72, 2021, IF=3,93
15. V Calu, A Ionescu, L Stanca, OI Geicu, F Iordache, AM Pisoschi, **A.I. Șerban**, L.Bîlteanu, Key biomarkers within the colorectal cancer related inflammatory microenvironment, Sci. Rep. 11 (1), 1-14, 2021
16. A Ionescu, L Bilteanu, OI Geicu, F Iordache, L Stanca, AM Pisoschi, A.Miron, **A.I. Șerban**, V.Calu, Multivariate Risk Analysis of RAS, BRAF and EGFR Mutations Allelic Frequency and Coexistence as Colorectal Cancer Predictive Biomarkers, Cancers 14 (11), 2792, 2022, IF=6,57
17. AM Pisoschi, A Pop, F Iordache, L Stanca, OI Geicu, L Bilteanu, **A.I. Șerban**, Antioxidant, anti-inflammatory and immunomodulatory roles of vitamins in COVID-19 therapy, Eur. J. Med. Chem, 232,114175, 2022, IF=6,82

18. A.M. Pisoschi, F. Iordache, L. Stanca, I. Gajaila, O.M. Ghimpeteanu, O.I. Geicu, L. Bilteanu, **A.I. Șerban**, Antioxidant, anti-inflammatory, and immunomodulatory roles of nonvitamin antioxidants in anti-SARS-CoV-2 therapy, *Journal of Medicinal Chemistry* 65(19), 12562-12593, 2022. IF:8.039.
19. R.A. Gheorghe-Irimia, D. Tapaloaga, P. Tapaloaga, L.I. Ilie, C. Sonea, **A.I. Șerban**, Mycotoxins and Essential Oils—From a Meat Industry Hazard to a Possible Solution: A Brief Review, *Foods* 11(22), 3666, 2022. IF: 5.42.
20. A.M. Pisoschi, A. Pop, F. Iordache, L. Stanca, O.I. Geicu, L. Bilteanu, **A.I. Șerban**, Antioxidant, anti-inflammatory and immunomodulatory roles of vitamins in COVID-19 therapy, *European Journal of Medicinal Chemistry* 232, 114175, 2022. IF: 7.11
21. O.I. Geicu, L. Bilteanu, L. Stanca, A. Ionescu Petcu, F. Iordache, A.M. Pisoschi, **A.I. Șerban**, Composition-based risk estimation of mycotoxins in dry dog foods, *Foods* 12(1), 110, 2022. IF: 5.42.
22. N.T. Constantin, C.M. Bercea-Strugariu, D. Bîrțoiu, F. P. Posastiuc, F. Iordache, L. Bilteanu, **A.I. Șerban**, Predicting pregnancy outcome in dairy cows: the role of IGF-1 and progesterone, *Animals* 13(10), 1579, 2023. IF:2.7.
23. A.M. Pisoschi, F. Iordache, L. Stanca, A. Ionescu Petcu, L. Purdoiu, O.I. Geicu, L. Bilteanu, **A.I. Șerban**, Comprehensive overview and critical perspective on the analytical techniques applied to aflatoxin determination—a review paper, *Microchemical Journal* 191, 108770, 2023. IF: 5.1.
24. F. Iordache, A. Ionescu Petcu, A.M. Pisoschi, L. Stanca, O.I. Geicu, L. Bilteanu, C. Curuțiu, B. Amuzescu, **A.I. Șerban**, PCR Array Profiling of miRNA Expression Involved in the Differentiation of Amniotic Fluid Stem Cells toward Endothelial and Smooth Muscle Progenitor Cells, *Int. J. Mol. Sci.* 25(1), 302, 2024. IF: 4.9.
25. A.M. Pisoschi, F. Iordache, L. Stanca, C. Cimpeanu, F. Furnaris, O.I. Geicu, L. Bilteanu, **A.I. Șerban**, Comprehensive and critical view on the anti-inflammatory and immunomodulatory role of natural phenolic antioxidants, *European Journal of Medicinal Chemistry* 265, 116075, 2024. IF: 6.1.
26. A.M. Pisoschi, F. Iordache, L. Stanca, E. Mitranescu, L. Bader Stoica, O.I. Geicu, L. Bilteanu, **A.I. Șerban**, Biosensors for food mycotoxin determination: A comparative and critical review, *Chemosensors* 12 (6), 92, 2024. IF: 3.7.

27. L. Stanca, L. Bilteanu, O.C. Bujor, V.A. Ion, A. C. Petre, L. Bădulescu, O.I. Geicu, A.M. Pisoschi, **A.I. Serban**, O.M. Ghimpeteanu, Development of functional foods: A comparative study on the polyphenols and anthocyanins content in chokeberry and blueberry pomace extracts and their antitumor properties, *Foods* 13 (16), 2552, 2024. IF: 5.42.
28. R. Anghel, L. Bilteanu, A.R. Folea, Ș.A. Marinescu, A.M. Pisoschi, M.F. Alexandrescu, A.I. Dumachi, L.N. Galeș, O.G. Trifănescu, A.F. Zgură, L.G. Șerbănescu, C. Capșa, A. Charalambous, **A. I. Șerban**, Assessing the Impact of Nutritional Status on the Quality of Life in Head and Neck Cancer Patients—The Need for Comprehensive Digital Tools. *Cancers*, 17 (7), 1128, 2025. IF: 4.4
29. A.M. Pisoschi, F.Iordache, L. Stanca, P.M. Rosu, N. Ciocirlie, O.I. Geicu, L. Bilteanu, **A.I. Serban**, Electrochemical nanosensors applied to the assay of some food components—A review. *Chemosensors*, 13 (8), 272, 2025. IF: 3.7
30. L. Bilteanu, C. O. Dumitru, A. Dumachi, F. Alexandrescu, R. Popa, O. Buiu, **A. I. Serban**, Towards Explainable Machine Learning from Remote Sensing to Medical Images—Merging Medical and Environmental Data into Public Health Knowledge Maps, *Machine Learning and Knowledge Extraction*, 7 (4), 140, 2025. IF:6.0.
31. A. M. Pisoschi, L. Stanca, F. Iordache, I. Ionascu, I. Gajaila, O. I. Geicu, L. Bilteanu, **A. I. Serban**, Nanostructure-Enhanced Optical Sensing Platforms for Pesticide Analysis in Food and Water Samples: A Review, *Chemosensors*, 14 (2), 43, 2026, IF: 3.7.

II. Articole în reviste ISI în calitate de coautor

1. G.O. Dragomir Bodea, M.C. Munteanu, D. Dinu, **A. I. Șerban**, F. Israel Roming, M. Costache, A. Dinischiotu, Influence of deoxynivalenol on the oxidative status of HepG2 cells, *Romanian Biotechnological Letters*, 14 (2), 4349-4359, **2009**. IF:0.381
2. M. Radu, M.C. Munteanu, S. Petrache, **A. I. Serban**, D.Dinu, M. Costache, A. Dinischiotu, The depletion of intracellular glutathione and increase of lipid peroxidation mediate the hematite nanoparticles-induced cytotoxicity in MRC-5 cells, *Acta Biochimica Polonica*, 57, 1-6, **2010**. IF: 1.239
3. D.Dinu, G.O.Bodea, C.D. Ceapa, M. C. Munteanu, F. Israel-Roming, **A. I. Serban**, A. Hermenean, M. Costache, O. Zarnescu, A.Dinischiotu, Adapted response of the

antioxidant defense system to oxidative stress induced by deoxynivalenol in Hek-293 cells, *Toxicon*, 57, 1023-1032, **2011**. IF: 2.352

4. L.Stanca, S.N. Petrache, M. Radu, **A. I. Serban**, M.C. Munteanu, D.Teodorescu, A.C. Staicu, C. Sima, M.Costache, C. Grigoriu, O. Zarnescu, A. Dinischiotu, Impact of silicon-based quantum dots on the antioxidative system in white muscle of *Carassius auratus gibelio*, *Fish Physiol Biochem* 38(4),963-975, **2012**; IF:1.735

5. A.M. Pisoschi, A. Pop, **A. I. Serban**, G.P. Negulescu, Ethanol determination by anamperometric bienzyme sensor based on a Clark-type transducer, *Journal of Electroanalytical Chemistry* 671, 85-91, **2012**. IF:2.822

6. S. N. Petrache, L.Stanca, **A. I. Serban**, C. Sima, A. C. Staicu, M. C. Munteanu, M. Costache, R. Burlacu, Otilia Zarnescu, Anca Dinischiotu, Structural and Oxidative Changes in the Kidney of Crucian Carp Induced by Silicon-Based Quantum Dots, *Int. J. Mol. Sci.* 13(8), 10193-10211, **2012**. IF:3.257

7. L. Stanca, S. N. Petrache, **A. I. Serban**, A. C. Staicu, C. Sima, M. C. Munteanu, O. Zarnescu, D. Dinu, A. Dinischiotu, Interaction of silicon based quantum dots with Gibel carp liver: oxidative and structural modifications, *Nanoscale Research Letters*, **2013**, 8:254. IF:3.125

8. AM. Pisoschi, A.Pop, **A. I. Serban**, C. Fafaneata, Electrochemical methods for ascorbic acid determination, *Electrochimica Acta*, 121, 443-460, **2014**. ISSN 0013-4686. IF:4.803

9. L. Stanca, C. Sima, S.N. Petrache (Voicu), **A. I. Serban**, A. Dinischiotu, In vitro evaluation of the morphological and biochemical changes induced by Si/Sio₂ QDs exposure of HepG2 cells, *Romanian Reports in Physics*, 67,(No. 4), 1512–1524, **2015**. IF: 1.367

10. S.N. Voicu, M. Balas, M.S. Stan, B. Trică, **A. I. Serban**, L. Stanca, A. Hermenean, A. Dinischiotu, Amorphous Silica Nanoparticles Obtained by Laser Ablation Induce Inflammatory Response in Human Lung Fibroblasts, *Materials*, 12 (7), Article number: 1026, **2019** IF:2.467

11. L. Stanca, O.I. Geicu, **A.I. Serban**, A. Dinischiotu, Interplay of Oxidative Stress, Inflammation, and Autophagy in RAW 264.7 Murine Macrophage Cell Line Challenged with Si/SiO₂ Quantum Dots, *Materials* 16 (14), 5083, 2023. IF: 3.2.

12. F. P. Posastiuc, G. Rizzoto, N.T. Constantin, G. Nicolae, K. Chiers, A.I.

Diaconescu, **A.I. Serban**, A. Van Soom, M.D. Codreanu, Anti-Müllerian hormone as a diagnostic marker for testicular degeneration in dogs: insights from cryptorchid models, *Frontiers in Veterinary Science* 11, 1481248, 2024. IF: 3.1.

13. F. P. Posastiuc, G. Rizzoto, N.T. Constantin, G. Nicolae, K. Chiers, A.I. Diaconescu, **A.I. Serban**, A. Van Soom, M.D. Codreanu, Anti-Müllerian hormone in feline cryptorchidism: serum levels, tissue expression, and implications for testicular health, *Theriogenology* 230, 54-60, 2024. IF:2.4.

14. A.M. Grămadă, A-E. Stoica, A.-G. Niculescu, A. C. Bîrcă, B. Ș. Vasile, A. M. Holban, T. Mihaiescu, **A.I. Serban**, et all., Zinc Oxide-Loaded Recycled PET Nanofibers for Applications in Healthcare and Biomedical Devices, *Polymers* 17 (1), 45, 2024. IF:4.7.

15. L.R. Balahura, A.I. Dinu, A. Lungu, H. Herman, C. Balta, A. Hermenean, **A.I. Șerban**, S. Dinescu, Implantable Polymer Scaffolds Loaded with Paclitaxel–Cyclodextrin Complexes for Post-Breast Cancer Tissue Reconstruction. *Polymers* 2025, 17, 402, 2025. IF: 4.9.

16. F.P. Posastiuc, N.T Constantin, C. Micșa, G. Nicolae, A.I. Diaconescu, M.D. Codreanu, **A.I. Șerban**, A. Van Soom, Is anti-müllerian hormone useful for monorchidism diagnosis in the tomcat? *Topics in Companion Animal Medicine*, 64, 100947, 2025. IF: 1.3.

17. A. Boiangiu, L. Bîlteanu, A. Costeschi, C.A. Nicolae, R.M. Sima, R. Vladareanu, A.I. Serban, S.A. Marinescu, V.N. Varlas, C. Iliescu, A. Filipescu, Bilateral ovarian metastases from gastric signet-ring cell carcinoma in an 18-year-old: a case report and narrative review, *Frontiers in Oncology*, 16, 1744052, 2026. IF:3.3.

18. R. Anghel, A.R. Folea, V.L. Moga, C. Pavel, D. Troncotă, C.O. Dumitru, A.I. Șerban, L. Bîlteanu, *Diagnostics*, 16(7), 1092, 2026. IF:3.3.

19. R. Anghel, A.R. Folea, V.L. Moga, C. Pavel, D. Troncotă, M. Celea, C.O. Dumitru, A.I. Șerban, L. Bîlteanu, Beyond the Scan: Adapting Multimodal Lung Cancer Screening for Central and Eastern Europe—Overcoming Systemic Barriers and Epidemiological Confounders, *Med. Sci.*,14(2), 259, 2026. IF: 4.4
<https://doi.org/10.3390/medsci14020259>

III. Articole în reviste indexate BDI, ca autor principal:

1. N.T. Constantin, F.P. Posastiuc, C.R. Andrei, O.I. Geicu, F. Iordache, L. Stanca, L. Bîlteanu, **A.I. Șerban**, Bovine Herpes Virus Quantification by Qpcr in the Blood of

- Asimptomatic Late-Term Cows, Scientific Works. Series C, Veterinary Medicine, 69 (2),41-46,2023. https://veterinarymedicinejournal.usamv.ro/pdf/2023/issue_2/Art6.pdf
2. Elena-Loredana Ungureanu, Gabriel Mustățea, Loredana Stanca, **A.I. Șerban**, Quantifying Bisphenol from Food Packaging and Assessment of its Cytotoxic Potential, “Agriculture for Life, Life for Agriculture” Conference Proceedings, 1 (1), 495–500. DOI: <https://doi.org/10.2478/alife-2018-0078>
 3. Irina Parvu, Ovidiu Geicu, **A.I. Șerban** (2011), The role of advanced glycation end products in the development of diabetes complications, Scientific Works, C Series, Veterinary Medicine, LVII (3), 195-206.
 4. **A.I. Șerban**, E. Condac, M. Costache, A. Dinischiotu, E. Ganea, Collagen Glycooxidation In Vitro, Romanian Journal of Biochemistry, 43-44, 51-62, 2006-2007.
 5. **A.I. Șerban**, I. Gâjâilă, Evidence for the Glycation of Collagen by Sensitive Capillary Electrophoresis Separation, Scientific Works, C Series, XLIX, 14-21, 2006.
 6. **A.I. Șerban**, E. Condac, E. Ganea, Sensitive FPLC Separation of Collagen Crosslinkings Induced by Glycation, Romanian Journal of Biochemistry, 40 (1-2), 57-62, 2003.
 7. **A.I. Șerban**, E. Condac, E. Ganea, In Vitro Formation of Advanced Glycation End Products (AGEs) Induces Collagen Crosslinking, Romanian Journal of Biochemistry, 39 (1-2), 63-69, 2002.

IV. Articole în reviste indexate BDI, ca și contributor:

1. I. Gâjâilă, **A.I. Șerban**, M. Dobrea, Effect of a Multienzymatic Product in The Broiler’s Diet, Scientific Works, C Series, LI, 150-156, 2007, ISSN:1222-5304.
2. I. Gâjâilă, G. Gâjâilă, **A.I. Șerban**, M. Dobrea, Studii Asupra Efectului 3-Fitazei Asupra Fosforului Asimilabil la Puii de Carne, Scientific Works, C Series, XL, 68-72, 2006.

V. Capitol Internațional:

1. A. Dinischiotu, L. Stanca, D. Gradinaru, S. N. Petrache, M. Radu, **A.I. Șerban**, Oxidative Stress and Nanotechnology, Methods and Protocols, Series: Methods in Molecular Biology, Vol.1028, Chapter 10: Lipid Peroxidation Due to In Vitro and In Vivo Exposure of Biological Samples to Nanoparticles, pp.156-164, Armstrong Donald, Bharali J. Dhruva (Eds.), Hummana Press, Springer, 2013. ISBN 978-1-62703-474-6.