

L I S T A

lucrărilor științifice

**Prof. univ. dr. hab. Munteanu Florentina-Daniela – Dr. din 2002, Profesor
Universitar din 2008, abilitare din 2018**

A. Teza de doctorat/abilitare

1. **Teza de doctorat: Munteanu Florentina-Daniela, 2002, *Studies of Electrocatalytic Reactions of NADH at Mediator Modified Electrodes and of H₂O₂ at Peroxidase Modified Electrodes*, Conducător științific: Prof. Univ. Dr. Lo Gorton, Universitatea Lund, Suedia**
2. **Teza de abilitare: Munteanu Florentina-Daniela, 2018, *Tehnici avansate de monitorizare și prevenire a poluării mediului***

B. Cărți și capitole publicate

- B1. Florentina-Daniela Munteanu, *Studies of Electrocatalytic Reactions of NADH at Mediator Modified Electrodes and of H₂O₂ at Peroxidase Modified Electrodes*, 2002 (ISBN 91-7422-005-5), KFS Lund, Universitatea Lund Suedia**
- B2. Munteanu Florentina-Daniela, *Fundamental and Applied Research on Recombinant and Wilde type Horseradish Peroxidase Based Biosensors*, Tipografia Universității Lund, Suedia 1997**
- B3. Annika Lindgren, Tautgirdas Ruzgas, Leonard Stoica, Florentina-Daniela Munteanu, and Lo Gorton *Cellobiose Dehydrogenase and Peroxidase Biosensors for Determination of Phenolic Compounds in Chemical and Biological Sensors for Environmental Monitoring*, A. Mulchandani and O. A. Sadik (Eds), ACS Symposium Series, vol. 762, 113.**
- B4. Munteanu Florentina-Daniela, Nicolae Dincă, Artur Cavaco-Paulo, *MALDI-ToF Mass Spectrometry in Textile Industry*, Springer Verlag, ISBN 978-1-4020-8811-7**
- B5. Ioan Calinovici, Florentina-Daniela Munteanu, Monica Lungu, Virgil Ciutină, *Strategia de Combatere a plantelor invazive*, <http://sesil.eu/ro>**

C. Lucrări indexate ISI/BDI publicate

1. Simona Gavrilas, Mirabela Raț, **Florentina-Daniela Munteanu**, Biowaste Valorisation and Its Possible Perspectives Within Sustainable Food Chain Development, **Processes**, 202513(7), 2085, <https://doi.org/10.3390/pr13072085>
2. Norica Godja, Saied Assadollahi, Melanie Hütter, Pooyan Mehrabi, Narges Khajehmeymandi, Thomas Schalkhammer, **Florentina-Daniela Munteanu**, Flexible screen-printed gold electrode array on polyimide/PET for nickel (II) electrochemistry and sensing, **Sensors**, 2025, 25(13), 3959, <https://doi.org/10.3390/s25133959>
3. Simona Gavrilas, Florina-Luciana Burescu, Bianca-Denisa Chereji, **Florentina-Daniela Munteanu**, The Impact of Anthropogenic Activities on the Catchment's Water Quality Parameters, **Water**, 2025, 17(12), 1791, <https://doi.org/10.3390/w17121791>
4. Norica Godja, **Florentina-Daniela Munteanu**, Environmentally Friendly Solutions as Potential Alternatives to Chromium-Based Anodization and Chromate Sealing for Aeronautic Applications, **Coatings**, 2025, 15(4), 439, <https://doi.org/10.3390/coatings15040439>
5. Simona Perța-Crișan, **Florentina-Daniela Munteanu**, Iolanda Tolan, Bianca-Denisa Chereji, Dumitru Condrat, Lucian Copolovici, Claudiu-Ștefan Ursachi, Partial substitution of pork fat with beeswax oleogels for improving the nutritional value of dry fermented sausages, **Bulletin of University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca. Food Science and Technology**, 2025, 82(1), 209-221, <https://doi.org/10.15835/buasvmcn-fst:2024.0033>
6. Blidar V., Gavrilas S., Perța-Crișan S., Ursachi C.S., **Munteanu F.D.**, Comparative Analysis of the Water Quality at Mures River Basin Based on Measured Parameters and Water Pollution Index, **Study Res.-Chem. Chem. Eng. Biotechnol. Food Ind.** 2024, 25 (4), 10.29081/ChIBA.2024.622
7. Simona Gavrilas, Mihaela Dochia, Andreea-Raluca Sărsan, Bianca-Denisa Chereji, **Florentina-Daniela Munteanu**, Use of Vegetable Waste for New Ecological Methods in Wool Fibre Treatments, **Clean Technologies**, 2024, 6(4), 1326-1339, doi.org/10.3390/CLEANTECHNOL6040063
8. Bud F., Perța-Crișan S., Ursachi C.S., Gavrilas S., **Munteanu F.D.**, Wastewater Global Pollution Index as an Indicator in Assessing the Quality of the Effluent from the Arad Municipal Treatment Plant, **Sci. Study Res.-Chem. Chem. Eng. Biotechnol. Food Ind.** 2024, 25 (3)

9. Chereji B.-D., **Florentina-Daniela Munteanu**, *Wool-Based Filters for the Retaining of Heavy Metals from Industrial and Contaminated Wastewater*, **Scientific Papers. Series B. Horticulture**, 2024, LXVIII, 1, 699-704
10. Hărțău R.C., Perța-Crișan S., Ursachi C.S., Gavrilas S., **Munteanu F.D.**, *Source Risk Assessment for Heavy Metals in Soil on the Site of a Hydrocarbon Power Plant*, **Sci. Study Res.-Chem. Chem. Eng. Biotechnol. Food Ind.** 2024, 25 (2), 203-214, doi.org/10.29081/ChIBA.2024.595
11. Ursachi C.-Ș., Perța-Crișan, S., Tolan I., Chambre D. R., Chereji B.-D., Condrat D., **Florentina-Daniela Munteanu**, *Development and Characterization of Ethylcellulose Oleogels Based on Pumpkin Seed Oil and Rapeseed Oil*, **Gels** 2024, 10(6), 384, doi.org/10.3390/gels10060384
12. Godja, N.C.; Munteanu, F.D. Hybrid Nanomaterials: A Brief Overview of Versatile Solutions for Sensor Technology in Healthcare and Environmental Applications. **Biosensors-Basel** 2024, 14, 23, doi:10.3390/bios14020067.
13. Perța-Crișan, S.; Ursachi, C.S.; Chereji, B.D.; Tolan, I.; **Munteanu, F.D.** *Food-Grade Oleogels: Trends in Analysis, Characterization, and Applicability*. **Gels** 2023, 9, 42, doi:10.3390/gels9050386.
14. Perța-Crișan, S.; Ursachi, C.S.; Chereji, B.D.; **Munteanu, F.D.** *Oleogels-Innovative Technological Solution for the Nutritional Improvement of Meat Products*. **Foods** 2023, 12, 21, doi:10.3390/foods12010131.
15. Castro, T.G.; Ferreira, T.; Matamá, T.; **Munteanu, F.D.**; Cavaco-Paulo, A. *Acetylation and phosphorylation processes modulate Tau's binding to microtubules: A molecular dynamics study*. **Biochim. Biophys. Acta-Gen. Subj.** 2023, 1867, 14, doi:10.1016/j.bbagen.2022.130276.
16. Blidar, E.V.; Gavrilas, S.; Ursachi, C.S.; Perța-Crișan, S.; **Munteanu, F.D.** *Perceptions on Drinking Water and Wastewater in a Local Area in Western Romania*. **Appl. Sci.-Basel** 2023, 13, 13, doi:10.3390/app132011401.
17. Gavrilas, S.; Ursachi, C.S.; Perța-Crișan, S.; **Munteanu, F.D.** *Recent Trends in Biosensors for Environmental Quality Monitoring*. **Sensors** 2022, 22, 19, doi:10.3390/s22041513.
18. Gavrilas, S.; Calinovici, I.; Chis, S.; Ursachi, C.S.; Rat, M.; **Munteanu, F.D.** *White Grape Pomace Valorization for Remediating Purposes*. **Appl. Sci.-Basel** 2022, 12, 15, doi:10.3390/app12041997.
19. Chereji, B.D.; **Munteanu, F.D.** *The Impact of Sheep Waste Wool on The Environment*. **Sci. Pap.-Ser. E-Land Reclam. Earth Obs. Surv. Environ. Eng.** 2022, 11, 458-463.

20. Burca, V.; Csorba, L.M.; **Munteanu, F.D.**; Rusu, S. *The Romanian consumers' perception regarding the safety of dietary supplements*. **J. Public Health-Heidelberg** 2022, 30, 1583-1602, doi:10.1007/s10389-020-01425-6.
21. Ursachi, C.S.; **Munteanu, F.D.**; Cioca, G. *The Safety of Slaughterhouse Workers during the Pandemic Crisis*. **Int. J. Environ. Res. Public Health** 2021, 18, 10, doi:10.3390/ijerph18052633.
22. Popitanu, C.; Cioca, G.; Copolovici, L.; Iosif, D.; **Munteanu, F.D.**; Copolovici, D. *The Seasonality Impact of the BTEX Pollution on the Atmosphere of Arad City, Romania*. **Int. J. Environ. Res. Public Health** 2021, 18, 11, doi:10.3390/ijerph18094858.
23. Perta-Crisan, S.; Ursachi, C.S.; Gavrilaș, S.; Oancea, F.; **Munteanu, F.D.** *Closing the Loop with Keratin-Rich Fibrous Materials*. **Polymers** 2021, 13, 26, doi:10.3390/polym13111896.
24. Constantin, O.E.; Milea, A.S.; Bolea, C.; Mihalcea, L.; Enachi, E.; Copolovici, D.M.; Copolovici, L.; **Munteanu, F.**; Bahrim, G.E.; Răpeanu, G. *Onion Allium cepa L. peel extracts characterization by conventional and modern methods*. **Int. J. Food Eng.** 2021, 17, 485-493, doi:10.1515/ijfe-2020-0310.
25. Ursachi, C.S.; Perta-Crisan, S.; **Munteanu, F.D.** *Strategies to Improve Meat Products' Quality*. **Foods** 2020, 9, 22, doi:10.3390/foods9121883.
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27. Gavrilaș, S.; Ursachi, C.S.; Dochia, M.; Perta-Crisan, S.; **Munteanu, F.D.** *The Influence of Different Vacuum Impregnation Solutions on the Colour of Fresh-Cut Apple Slices*. **Sci. Study Res.-Chem. Chem. Eng. Biotechnol. Food Ind.** 2020, 21, 523-531.
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29. Nastuneac, V.; Gavrilaș, S.; **Munteanu, F.D.** *Assesment of the Water Quality in Siret Hydrographic Basin*. **Sci. Study Res.-Chem. Chem. Eng. Biotechnol. Food Ind.** 2019, 20, 471-480.
30. Cioca, G.; **Munteanu, F.D.** *Estimation of the Amount of Disposed Antibiotics*. **Sustainability** 2019, 11, 9, doi:10.3390/su11061800.
31. Castro, T.G.; **Munteanu, F.D.**; Cavaco-Paulo, A. *Electrostatics of Tau Protein by Molecular Dynamics*. **Biomolecules** 2019, 9, 16, doi:10.3390/biom9030116.
32. Andrei, V.; Copolovici, D.; **Munteanu, F.D.**; Wetie, A.G.N.; Mihai, I.; Darie, C.C.; Vasilescu, A. *Detection of Biomedically Relevant Stilbenes from Wines by Mass*

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E. Brevete obținute în întreaga activitate

E1. Sirghie Cecilia, Radu Dana Gina, **Munteanu Florentina-Daniela**, Pag Andreea, Dochia Mihaela, Tomescu Daniel, *Process for Melting Bast Fiber Plants, Such As: Flax, Hemp, Jute Etc*, 2014

F. Contracte de cercetare în întreaga activitate

F1. 2021-2024 Research Centre in Sustainable Bio-Eco-Economy; **Member in management team**; <https://www.bioecoes.uav.ro/>

F2. 2022-2024 Cell-penetrating peptides-containing systems as a potential platform for the use in breast and prostate cancer treatment; Senior Researcher, <https://cpps-cancer.uav.ro/>

F3. 2018-2020 PN-III-P1-1.2-PCCDI2017-0569 - **Principal Investigator** "Closing bioeconomy value chains through innovative market demanded bioproducts -PRO-SPER", -10-PCCDI/2018

- F4.** 2017-2018 PN3, Romania-France Bilateral Cooperation Projects, BM46, **Principal investigator** "Valorisation of wine by-products - applications for wastewater treatment"
- F5.** 2014-2017 PN2, Collaborative Applied Research Projects, **Principal investigator** PN-II-PT-PCCA-2013-4-0191 Interactomics of galactosaminoglycans in extracellular matrix by advanced mass spectrometry
- F6.** 2010-2012 PN2, Capacities, Module III, **Principal investigator** - Folate-based nanobiodevices for integrated diagnosis/therapy targeting chronic inflammatory diseases
- F7.** 2009-2013 FP7- NMP-2008-LARGE-2, **Principal investigator** Project No 228827- Folate-based nanobiodevices for integrated diagnosis/therapy targeting chronic inflammatory diseases
- F8.** 2006-2009 NATO Nr. EAP.RIG.982234 - **Principal investigator** „Biosensors for Environmental Pollutants Monitoring”
- F9.** 2006-2008 Research of excellence entitled **Principal investigator** "Computerized filtration systems and separation systems for textile processes".
- F10.** 2005-2007 Research Contract of Excellence No. 3179/12.10.2005 **Principal investigator** "Electrochemical Characterization and Kinetic Study of Biodegradation of Pollutants Environment"
- F11.** 2005-2006 SFRH/BPD/16674/2004, **Principal investigator Portugal** „Electrochemical Characterization of Redox Biodegradation of Redox Dyes” within Minho University, Portugal

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