

**Selected Publications**

1. **PhD thesis: Munteanu F-D.**, 2002, *Studies of Electrocatalytic Reactions of NADH at Mediator Modified Electrodes and of H<sub>2</sub>O<sub>2</sub> at Peroxidase Modified Electrodes*, Supervisor Prof. Univ. Dr. Lo Gorton, Lund University, Sweden
2. **Munteanu, Florentina Daniela**; Sanislav, Andreia; Stanescu, Michaela Dina, *Coupled Electrochemical and Enzymatic Degradation of Two Anthraquinone Dyes*, *Revue Roumaine de Chimie*, 2015, 60, 2-3, 233-239, **WOS:000360325400014 (IF 0,250)**
3. Sirghie, Cecilia; Bodescu, Adina-Maria; Botar, Alexandru; Cavaco-Paulo Artur, **Munteanu Florentina-Daniela**, *Characterization of ligno-cellulosic materials bleached with oxo-diperoxo-molybdates*, *Carbohydrate Polymers*, 2013, 98, 1, 490-494, **WOS:000325835600064 (IF 3,916)**
4. Margarida M. Fernandes, Andreia C. Gomes, Andreia Vasconcelos, **Florentina-Daniela Munteanu**, Tzanko Tzanov, Maria Sameiro T. Gonçalves, Nicole End, Kai-Uwe Schoening, Georg M. Guebitz and Artur Cavaco-Paulo, *Protein disulphide isomerase-assisted functionalization of keratin-based matrices*, *Applied Microbiology and Biotechnology*, 2011, 90 4, 1311-1321, **WOS:000290574700012 (IF 3,425)**
5. Munteanu, Florentina-Daniela; Cavaco-Paulo, Artur, *Biosensors Based on Laccase for Detection of Commercially Reactive Dyes*. *Analytical Letters* 2010, 43, (7-8), 1126-1131, **WOS:000277838400006 (IF 0,920)**
6. Brissos Vânia; Pereira Luciana; **Munteanu Florentina-Daniela**; Cavaco-Paulo Artur; Martins Lígia O *Expression system of CotA-laccase for directed evolution and high-throughput screenings for the oxidation of high-redox potential dyes*. *Biotechnology Journal* 2009;4(4):558-563, **DOI:10.1002/biot.200800248 (Wiley, Pubmed)**

7. **Florentina-Daniela Munteanu**, Patricia Ferreira, Francisco J. Ruiz-Dueñas, Angel T. Martínez, Artur Cavaco-Paulo, *Bioelectrochemical investigations of aryl-alcohol oxidase from Pleurotus eryngii*, *in* Journal of Electroanalytical Chemistry, 2008, Volume 618, Issues 1-2, 1 July 2008, Pages 83-86, [WOS:000257007800012 \(IF 2,484\)](#)
8. **Florentina-Daniela Munteanu**, Carlos Basto, Georg Gübitz, Artur Cavaco-Paulo *Staining of wool using the reaction products of ABTS oxidation by laccase: synergetic effects of ultrasound and cyclic voltammetry* *in*: Ultrasonics Sonochemistry, 2007, 14 (3), 363-367, [WOS:000243627400013 \(IF 2,434\)](#)
9. **Florentina-Daniela Munteanu**, Delia Gligor, Ionel Catalin Popescu and Lo Gorton *Formate Dehydrogenase-Modified Carbon Paste Electrodes for Amperometric Detection of Formate* *in*: Revue Roumaine de Chimie, 2006, 51(1), 25, [WOS:000238234900004 \(IF 0,208\)](#)
10. Andrea Zille, **Florentina-Daniela Munteanu**, Georg Gübitz, Artur Cavaco-Paulo *Laccase Kinetics of Degradation and Coupling Reactions* *in*: Journal of Molecular Catalysis:B, 2005, 33 (1-2), 23, [WOS:000229394200004 \(IF 1,685\)](#)
11. **Florentina-Daniela Munteanu**, Francisco Ruiz-Dueñas, Angel Martínez, Artur Cavaco-Paulo *Kinetics of Direct and Mediated Electron Transfer of Versatile Lignolytic Peroxidase Modified Graphite Electrodes* *in*: Journal of Electroanalytical Chemistry, 2005, 580 (1), 35, [WOS:000229512700005 \(IF 2,223\)](#)
12. **Florentina-Daniela Munteanu**, Nicolas Mano, Alexander Kuhn, and Lo Gorton *NADH Electrooxidation Using Nitro-Fluorenone Derivatives Immobilised on Zirconium Phosphate* *in*: Journal of Electroanalytical Chemistry, 2004, 564, 167. [WOS:000220097900019 \(IF 2,228\)](#)
13. Delia Dicu, **Florentina-Daniela Munteanu**, Ionel Catalin Popescu, Lo Gorton *Indophenol and O-Quinones Derivatives Immobilized on Zirconium Phosphate for NADH Electrooxidation* *in*: Analytical Letters, 2003, 36 (9), 1775, [WOS:000184660600007 \(IF 0,929\)](#)
14. **Florentina-Daniela Munteanu**, Delia Dicu, Ionel Catalin Popescu, Lo Gorton *NADH Electrooxidation Using Carbonaceous Electrodes Modified with Dibenzo-Dithia-*

- Diazapentacene* *in*: *Electroanalysis*, 2003, 15(5-6), 383. [WOS:000182694800006](#) (IF 1,811)
15. **Florentina-Daniela Munteanu**, Lo Gorton, Yoshiyuki Okamoto *Electrochemical and Catalytic Investigation of Carbon Paste Modified With Toluidine Blue O Covalently Immobilised on Silica Gel* *in*: *Analytica Chimica Acta*, 2003, 476, 43, [WOS:000180168800005](#), (IF 2,210)
16. Per Persson, Simona Larsson, Leif J. Jönsson, Nils-Olof Nilvebrant, Björn Sivik, **Florentina Munteanu**, Lars Thörneby, Lo Gorton *Supercritical Fluid Extraction of a Lignocellulosic Hydrolysate of Spruce for Detoxification and to Facilitate Analysis of Inhibitors* *in*: *Biotechnology & Bioengineering*, 2002, 79(6), 694, [WOS:000177549400013](#) (IF 2,211).
17. **Florentina-Daniela Munteanu**, Marcus Mosbach, Albert Schulte, Wolfgang Schuhmann, and Lo Gorton *Fast Scan Cyclic Voltammetry and Scanning Electrochemical Microscopy for Studies on the Acidic pH Effect on 2-Electron Mediators Immobilised on Zirconium Phosphate* *in*: *Electroanalysis*, 2002, 14(21), 1479, [WOS:000179597300004](#) (IF 1,811)
18. **Florentina-Daniela Munteanu**, Nicolas Mano, Alexander Kuhn, Lo Gorton *Mediator Modified Electrodes for Catalytic NADH Oxidation: High Rate Constants at Interesting Overpotentials* *in*: *Bioelectrochemistry*, 2002, 56, 67, [WOS:000176715700016](#) (IF 1,463).
19. **Florentina-Daniela Munteanu**, Lauro Kubota, and Lo Gorton *Effect of pH on the Catalytic Electrooxidation of NADH Using Different 2-electron Mediators Immobilised on Zirconium Phosphate* *in*: *Journal of Electroanalytical Chemistry*, 2001, 509 (1), 2 [WOS:000170406300002](#) (IF 1,960).
20. **Florentina-Daniela Munteanu**, Lo Gorton, Annika Lindgren, Tautgirdas Ruzgas, Jenny Émneus, Elisabeth Csöregi, Irina G. Gazaryan, Igor V. Ouporov, Elena A. Mareeva and L. Mark Lagrimini *Direct and Mediated Electron Transfer Catalysed by Anionic Tobacco Peroxidase: Effect of Calcium Ions* *in*: *Applied Biochemistry and Biotechnology*, 2000, 88, 321 [WOS:000089923900031](#) (IF 0,843).

21. Lauro Kubota, **Florentina-Daniela Munteanu**, A. Roddick-Lanzilotta, A. J. McQuillan, and Lo Gorton *Electrochemical Investigation of Some Aromatic Redox Mediators Immobilised on Titanium Phosphate in: Quimica Analitica*, 2000, 19 (Suppl 1) 15, [WOS:000165192000004 \(IF 0,246\)](#).
22. Lo Gorton, Annika Lindgren, Ted Larsson, **Florentina-Daniela Munteanu**, Tautgirdas Ruzgas and Irina G. Gazaryan *Direct Electron Transfer between Heme-Containing Enzymes and Electrodes as Basis for Third Generation Biosensors in: Analytica Chimica Acta*, 1999, 400, 91, [WOS:000084204200010 \(IF 0,562\)](#).
23. Annika Lindgren, **Florentina-Daniela Munteanu**, Irina G. Gazaryan, Tautgirdas Ruzgas, Lo Gorton *Comparison of Rotating Disk and Wall-Jet Electrode Systems for Studying the Kinetics of Direct and Mediated Electron Transfer for Horseradish Peroxidase on a Graphite Electrode in: Journal of Electroanalytical Chemistry*, 1998, 458, 113, [WOS:000077470400012 \(IF 1,760\)](#).
24. **Florentina-Daniela Munteanu**, Annika Lindgren, Jenny Émneus, Lo Gorton, Tautgirdas Ruzgas, Elisabeth Csöregi, Anton Ciucu, R. B. van Huystee, Irina G. Gazaryan, and L. Mark Lagrimini *Bioelectrochemical Monitoring of Phenols and Aromatic Amines in Flow Injection Using Novel Plant Peroxidases in: Analytical Chemistry*, 1998, 70, 2596, [WOS:000074584700053 \(IF 4,580\)](#).
25. Tzanov Tzanko, **Florentina-Daniela Munteanu**, Artur Cavaco-Paulo, CELL 130-Isomerases for functional modification of fibrous polymers, Abstracts of Papers of American Chemical Society, 2007, 233, 674, [WOS:000207722800572](#)
26. Margarida Fernandes, Carlos Basto, Andrea Zille, **Florentina-Daniela Munteanu**, Georg M. Gübitz, Artur Cavaco-Paulo, **POLY 441-Sono-enzymatic polymerization of catechol**, Abstracts of Papers of American Chemical Society, 2007, 232, [WOS:000207781701533](#)
27. Andrea Zille, **Florentina-Daniela Munteanu**, Georg M. Gübitz, Artur Cavaco-Paulo, Laccase polymerization of amino-phenol compounds, Abstracts of Papers of American Chemical Society, 2005, 229, 2, U955, [WOS:000235066604329](#)
28. Annika Lindgren, Tautgirdas Ruzgas, Leonard Stoica, **Florentina-Daniela Munteanu**, and Lo Gorton, *Cellobiose dehydrogenase and peroxidase biosensors for determination*

- of phenolic compounds*, Abstracts of Papers of American Chemical Society, 1999, 217, U789, [WOS:000079148102461](#)
- 29. Patent:** Sîrghie 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, [Derwent Primary Accession Number: 2013-Q10123](#) [13]
- 30.** Delia Gligor, **Florentina-Daniela Munteanu**, Ionel Catalin Popescu, Lo Gorton *NADH Electrocatalytic Oxidation at 2,6-Dichlorophenolindophenol Modified Electrodes în:* Annals of West University of Timisoara, Series Chemistry, 2003, 12 (1), 1. ([GoogleScholar](#))
- 31. Florentina-Daniela Munteanu**, Biosensors for Determination of Azo Dyes, Annals of the University of Oradea, Fascicle of Textiles-Leatherwork, 2007, vol VIII, 55([GoogleScholar](#))
- 32. Florentina-Daniela Munteanu**, Mihaela Dochia, Cecilia Sirghie, Studies on the Stability of a Laccase Used in Ultrasound or in presence of Emolient , Annals of the University of Oradea, Fascicle of Textiles-Leatherwork, 2007, vol VIII, 62, ([GoogleScholar](#))
- 33. Florentina Daniela Munteanu**, Monica Elena Lungu, Oana Brînzan, Dana Radu, The unecological waste dump in Arad city, I: Determination of pollutants in, Scientifical and Technical Bulletin of Aurel Vlaicu University Arad, Series Chemistry, Food Science & Engineering, 2006.vol.11(XII), 259
- 34. Florentina Daniela Munteanu**, Paulo Durão, O. Lígia Martins, Artur Cavaco-Paulo, Determination of the Redox Potential of Some Laccases in, Scientifical and Technical Bulletin of Aurel Vlaicu University Arad, Series Chemistry, Food Science & Engineering, 2006.vol.11(XII), 56
- 35. Florentina-Daniela Munteanu**, Artur Cavaco – Paulo, Use of Two Redox Enzymes for Azo Dyes Decolorization, Scientifical and Technical Bulletin of Aurel Vlaicu University Arad, Series Chemistry, Food Science & Engineering, 2005.vol.10(XI), 56-64

36. Onofrei Adriana-Gabriela, **Florentina Munteanu**, Monica Zdremtan, Alexandra Anghel, Anamaria Lucaci, Fitointercession study of soils contaminated with some heavy metals, Bulletin USAMV-CN, 2007, 63-64, ([GoogleScholar](#))
37. Anghel Alexandra, Lucaci Anamaria, Ydremțan Monica, **Munteanu Florentina-Daniela**, Onofrei Adriana-Gabriela, Fitoremedierea solurilor contaminate cu metale grele, Simpozionul Geoecologia, 2007, 6 ([GoogleScholar](#))
38. Dinca Nicolae, Sisu Eugen, Munteanu Florentina, Grosu Viorica, application of csi-diff-ms software for identification of the best quantum chemical method for 3-and 4-nitrobenzophenone dimethylacetal molecules and fragmentation ions, Scientifical and Technical Bulletin of Aurel Vlaicu University Arad, Series Chemistry, Food Science & Engineering, 2005, 10(XI), ([GoogleScholar](#))

### Conferences presentations

1. 6<sup>th</sup> International Symposium on Research and Education in an Innovation Era, Decembrie 8-10, 2016, Arad, România
2. New Trends on Sensing- Monitoring- Telediagnosis for Life Sciences, Braşov, Romania, Septembrie, 3-5, 2015
3. 5<sup>th</sup> International Symposium on Research and Education in an Innovation Era, Noiembrie 5-7, 2014, Arad, România
4. New Trends on Sensing- Monitoring- Telediagnosis for Life Sciences Brasov, Romania, July 24-26, 2014
5. Development of Novel Nanotechnology Based Diagnostic Systems for Rheumatoid Arthritis and Osteoarthritis (NanoDiaRA), Noiembrie 2013, Lisabona, Portugalia
6. 4<sup>th</sup> International Symposium on Research and Education in an Innovation Era, Noiembrie 8-9, 2012, Arad, România
7. The 3rd International Conference on Institutional Strategic Quality Management in Higher Education ISQM 2011, 14-16 July 2011, Sibiu - Romania)
8. The 2nd International Conference on Institutional Strategic Quality Management in Higher Education ISQM 2010, 14-16 October 2010, Sinaia - Romania)

9. 3<sup>rd</sup> International Symposium on Research and Education in an Innovation Era, Noiembrie 10-12, 2010, Arad, România
10. SECOSAFT , Mai 22-23 2010, Sibiu, România
11. *International Conference On Chemistry and Chemical Engineering* , Mai 28-30, 2008, Timișoara, România
12. *Conference on Condensed Matter Physics*, Iulie 16-18, 2008, Timișoara, România
13. *European Meeting on Oxizymes*, Iunie 16-18, 2008, Helsinki, Finlanda
14. The 41st IUPAC World Chemistry Congress, August 5-11, 2007, Torino, Italia
15. 1<sup>st</sup> Advanced Research Workshop on Applications of Mass Spectrometry in Life Safety under NATO auspices, Septembrie 23-27, 2007, Herculane, România
16. Modern Technologies and Performant Management in The Textiles – Leatherwork Field, 24-26 Mai, 2007, Oradea, România
17. Prezent și perspective în biotehnologiile alimentare, 15.17 Noiembrie, 2007, Suceava, România
18. Prospects for the 3<sup>rd</sup> Millenium Agriculture, 4-6 Octombrie, 2007, Cluj Napoca, România
19. EcoMediu, 21-23 Noiembrie, 2007, Arad, România
20. The 7<sup>th</sup> Workshop on Biosensors and Bioanalytical  $\mu$ -Techniques in Environmental and Clinical Analysis, Septembrie 10-14, 2006, Kusadasi, Turcia
21. XVII International Symposium on Bioelectrochemistry and Bioenergetics, 3rd Spring Meeting, Bioelectrochemistry, Iunie 19-24, 2005, Coimbra, Portugalia
22. COST E23 *Biotechnologia in Industria Celulozei și Hârtiei*, Aprilie 26-29, 2005, Baiona (Pontevedra), Spania
23. 229th ACS Conference, Martie 13-17, 2005, San Diego, USA
24. Workshop of COST Action 847 & D32, Noiembrie 11-12, 2004, Póvoa de Varzim, Portugalia
25. Workshop of COST ACTION 847/WG 4 meeting, Octombrie 28-29, 2004, Sofia, Bulgaria
26. 13<sup>th</sup> Romanian International Conference on Chemistry and Chemical Engineering, Septembrie 16-20, 2003, București, România

27. 11<sup>th</sup> Physical Chemistry Conference with International Participation, ROMPHYSchem 11, Septembrie 2-5, 2003, Timișoara, Romania
28. The XVII<sup>th</sup> International Symposium on Bioelectrochemistry and Bioenergetics, Iunie 19-24, 2003, Florența, Italia
29. Journées d'Electrochimie 2003, Iunie 3-6, 2003, Poitiers, Franța
30. The Seventh World Congress on Biosensors, Mai 15-17, 2002, Kyoto, Japonia
31. German-Swedish Workshop on Biomolecular Recognition for Analytical Biochemistry, Decembrie 8, 2001, Luckenwalde, Germania
32. Analysdagarna, Iunie 11-14, 2001, Stockholm, Suedia
33. New Direction in Electroanalysis, Aprilie 22-25, 2001, Salford, Anglia
34. Faraday Discussion 116, Bioelectrochemisry, Iulie 17-19, 2000, Southampton, Anglia
35. Biosensors, Mai 24-26, 2000, San Diego, USA
36. Analysdagarna" Iunie 14-17, 1999, Uppsala, Suedia
37. Joint Meeting in Bioanalytical Chemistry, Octombrie 29-30, 1998, Lund Suedia
38. Biosensors, Iunie 3-5, 1998, Berlin, Germania
39. Bioelectrochemistry and Bioenergetics, Mai 23-29, 1998, Vingstedcentret, Danemarca

15.01.2018

Florentina-Daniela Munteanu





## Projects

### International:

1. 2009-2013- **FP7- NMP-2008-LARGE-2, Proiect No 228827-** Folate-based nanobiodevices for integrated diagnosis/therapy targeting chronic inflammatory diseases (
2. 2006-2009- Contract de Cercetare **NATO Nr. EAP.RIG.982234** intitulat „*Biosensors for Environmental Pollutants Monitoring*”
3. 2004-2005 - **SFRH/BPD/16674/2004**, Portugalia „*Electrochemical Characterization of Redox Biodegradation of Redox Dyes*” (derulat în cadrul Minho University)

### National:

1. 2017-2018 – **PN3, Romania\_france Bilateral Cooperation, BM46/2017, Valorisation of winery by-products - application for wastewater treatment**
2. 2014-2017- **PN2, Proiecte Colaborative de Cercetare Aplicativă**, PN-II-PT-PCCA-2013-4-0191 Interactomica galactozaminoglicanilor în matricea extracelulară prin spectrometrie de masa avansată
3. 2010-2012- **PN2, Capacități, Modulul III**, - Folate-based nanobiodevices for integrated diagnosis/therapy targeting chronic inflammatory diseases
4. 2006-2008 - **CEEX** „*Computerized systems for filtration and separation with ultrasound and biosensor controlled for textile processes*”
5. 2005 –2007 – **CEEX 3179/12.10.2005** „*Electrochemical Characterization and Kinetic Study of Biodegradation of Environmental Pollutants*”

### Member in projects

1. 2017-2018- **PN-III-P2-2.1-PTE- 2016-0217-** Demonstrative installation for innovative technology of melting hemp
2. 2016-2019 – Novel Bio-inspired Cellular Nano-Architectures (BioCell-NanoART), **POC-A1-A1.1.3-E-2015**

3. 3. 2014-2015 - Research Center for Technical and Natural Sciences ", project co-financed by the European Union through the European Regional Development Fund under the Sectoral Operational Program" Increasing Economic Competitiveness ": INVESTMENTS FOR YOUR FUTURE
4. 2014-2015 - SOP HRD - Priority Axis 5 "Promoting Active Employment Measures", Major Area of Intervention 5.1. "Development and implementation of active employment measures in the West Region" 131980 - RE-ACTIVE ON THE LABOR MARKET! The professional integration of disadvantaged categories into the labor market,
5. 2010-2013 - Sectoral Operational Program Increase of Economic Competitiveness, Priority Axis 2 - Competitiveness through RDI, Operation 2.1.2: "High-Level Scientific Projects CD with Specialists from Abroad": Liberian Plants - Strategic Renewable Resources for the Economy European Union - BASTEURES
6. 2006-2008 - CEEEX Consortium excellence research; Affiliation: VIASAN; "Determination of the expression of complex glycosphingolipids in the central nervous system by polyfunctional integrated microchip devices coupled with high performance mass spectrometry"
7. 2006-2008- Research of Excellence - Module 3. "Integration of a Romanian Center for High Performance Biomedical Mass Spectrometry in the International and European Research Area"
8. 2006-2009- Excellence Research - Module 3 "Scientific Partnership in Nanosciences and Nanotechnologies Applied in Textiles"
9. 2006-2007 - CEEEX Consortium Excellence Research "New Technologies Applied to Liberian Fibers Using Chemical and Ultrasound Processes in Ultrasound for Obtaining High Performance Materials. AcronymTENZINUS
10. 2006-2008- Excellence Research - Module 3 "Regional Network of Excellence in the Micro-Nano-Bio Technology and Textiles for Medical Applications: EUROTExMED Acronym"
11. 2006-2008 - CEEEX Consortium Excellence Research "Polyoxometallic compounds (POMs) with catalytic oxidative activity for peak applications. POMALB

12. 2006 - Preparation of a feasibility study to solve the neutralization of the Arad waste dumps "contract signed between Arad City Hall and" Aurel Vlaicu "University