

**Nume și prenume cadru didactic: Bounegru Alexandra Virginia**

## ANEXA

### Listă de lucrări

#### **Articole publicate în reviste indexate ISI**

1. **Alexandra Virginia Bounegru**, Constantin Apetrei. Development of a Novel Electrochemical Biosensor Based on Carbon Nanofibers–Gold Nanoparticles–Tyrosinase for the Detection of Ferulic Acid in Cosmetics in Sensors Journal 24.11.2020. ISSN 1424-8220 DOI: 10.3390/s20236724
2. **Alexandra Virginia Bounegru**, Constantin Apetrei. Carbonaceous Nanomaterials Employed in the Development of Electrochemical Sensors Based on Screen-Printing Technique—A Review in Catalysts Journal 17.06.2020. ISSN 2073-4344 DOI: 10.3390/catal10060680
3. **Alexandra Virginia Bounegru**, Constantin Apetrei. Voltammetric Sensors Based on Nanomaterials for Detection of Caffeic Acid in Food Supplements in Chemosensors. 18.06.2020. ISSN 2227-9040 DOI: 10.3390/chemosensors8020041
4. **Bounegru, A.V.**; Apetrei, C. Voltamperometric Sensors and Biosensors Based on Carbon Nanomaterials Used for Detecting Caffeic Acid—A Review. IJMS 2020, 21, 9275, doi:10.3390/ijms21239275. F.I. 4.556
5. **Bounegru, A.V.**; Apetrei, C. Laccase and Tyrosinase Biosensors Used in the Determination of Hydroxycinnamic Acids. IJMS 2021, 22, 4811, doi:10.3390/ijms22094811. F.I. 4.556
6. Gunache (Roșca), R.O.; **Bounegru, A.V.**; Apetrei, C. Determination of Atorvastatin with Voltammetric Sensors Based on Nanomaterials. Inventions 2021, 6, 57, doi:10.3390/inventions6030057.
7. **Bounegru, A.V.**; Apetrei, C. Development of a Novel Electrochemical Biosensor Based on Carbon Nanofibers–Cobalt phthalocyanine–Laccase for the Detection of p-Coumaric acid in Phytoproducts. IJMS 2021; <https://doi.org/10.3390/ijms22179302>
8. **Bounegru, A.V.**; Apetrei, C. Evaluation of Olive Oil Quality with Electrochemical Sensors and Biosensors: A Review; Int. J. Mol. Sci. 2021, 22(23), 12708; <https://doi.org/10.3390/ijms222312708>
9. **Bounegru, A.V.**; Apetrei, Simultaneous Determination of Caffeic Acid and Ferulic Acid Using a Carbon Nanofiber-Based Screen-Printed Sensor. Sensors 2022, 22(13), 4689; <https://doi.org/10.3390/s22134689>
10. **Bounegru, A.V.**; Apetrei, Sensitive Detection of Hydroxytyrosol in Extra Virgin Olive Oils with a Novel Biosensor Based on Single-Walled Carbon Nanotubes and Tyrosinase. Int. J. Mol. Sci. 2022, 23(16), 9132; <https://doi.org/10.3390/ijms23169132>
11. **Bounegru, A.V.**; Apetrei, C. Studies on the Detection of Oleuropein from Extra Virgin Olive Oils Using Enzymatic Biosensors. International Journal of Molecular Sciences 2022, 23, 12569, doi:10.3390/ijms232012569
12. **Bounegru, A.V.**; Bounegru, I. Chitosan-Based Electrochemical Sensors for Pharmaceuticals and Clinical Applications. Polymers 2023, 15, 3539, doi:10.3390/polym15173539.
13. Roșca, R.O.; **Bounegru, A.V.**; Apetrei, C. Quantification of Statins in Pharmaceutical Products Using Screen-Printed Sensors Based of Multi-Walled Carbon Nanotubes and Gold Nanoparticles. Inventions 2023, 8, 111, doi:10.3390/inventions8050111.
14. **Bounegru, A.V.**; Apetrei, C. Tyrosinase Immobilization Strategies for the Development of Electrochemical Biosensors—A Review. Nanomaterials 2023, 13, 760, doi:10.3390/nano13040760.

#### **Articole publicate în reviste indexate in baze de date internationale**

15. Veronica Filimon, **Alexandra Virginia Bounegru**, Simona Butan. Boron compounds: Challenges and Applications in food industry. Journal of Agroalimentary Processes and Technologies 2023, 29(2)

#### **Capitole în cărți publicate**

16. Constantin Apetrei, Alexandra Virginia Bounegru. Electronic Noses and Traceability of Foods. In Reference Module in Food Science 12.11.2020. ISBN: 9780081005965 <https://doi.org/10.1016/B978-0-08-100596-5.22852-7>

## Participări la conferințe naționale și internaționale

1. Alexandra Virginia Mereșescu (Bounegru), Constantin Apetrei. Development of Screen-Printed Sensors Based on Carbonaceous Nanomaterials, SCDS-UDJG 2019, Galați, 13-14 Iunie 2019
2. Alexandra Virginia Mereșescu (Bounegru), Constantin Apetrei. Voltammetric Determination of Caffeic Acid in Pharmaceutical Products, S3-221. RICCCE 21, 21st Romanian International Conference on Chemistry and Chemical Engineering, Septembrie 4-7 2019, Constanta – Mamaia, ROMANIA.
3. Mereșescu (Bounegru) Alexandra Virginia, Apetrei Constantin. Development of screen-printed sensors based on carbonaceous nanomaterials for the determination of caffeic acid. UGALINVENT, Research and Innovation Salon, Ediția a IV-a, 16-18 Octombrie 2019, Page 114.
4. Alexandra Virginia MEREȘESCU (Bounegru), Constantin APETREI. Development of nanomaterialsbased electrochemical sensors for the determination of caffeic acid from food supplements, Iasi CHEM Conference 3th Edition, IIAlexandru Ioan Cuza University of Iasi, 31.oct - 1.nov 2019.
5. Participare la Școala de vară- Food Safety and Healthy Living- International Summer School, 5- 8.07.2020
6. Mereșescu (Bounegru) Alexandra Virginia, Apetrei Constantin. Development of Screen-printed Sensors And Biosensors For The Detection of Ferulic Acid. National Online Conference of Biophysics, CNB 2020, 14 - 16 Iunie 2020
7. Mereșescu (Bounegru) Alexandra Virginia, Apetrei Constantin. Enzyme Sensor Based on Carbon Nanofibers Modified with Gold Nanoparticle and Tyrosinase Used for Ferulic Acid Detection in Cosmetics. SCDS-UDJG 2020, Galați, 18-19 Iunie 2020
8. Ancuta Dinu, Dorin Dascalescu, Irina Georgiana Munteanu, Alexandra Virginia Bounegru, Ramona-Oana Rosca, Constantin Apetrei. Electrochemical sensors based on nanomaterials employed in water analysis. SCDS-UDJG 2020, Galați, 18-19 Iunie 2020.
9. Alexandra Virginia Mereșescu (Bounegru), Constantin Apetrei. Electrochemical Determination Of Ferulic Acid In Cosmetics Using Screen-Printed Carbon Nanofiber Electrodes Modified With Gold Nanoparticles. New Trends on Sensing- Monitoring- Telediagnosis for Life Sciences NT SMT-LS 2020 Brasov, Romania, Iulie 3-4, 2020.
10. Alexandra Virginia Mereșescu (Bounegru), Constantin Apetrei. Electrochemical Sensor Based On Carbon Nanofibers For Detection Of P-Coumaric Acid In Phytoproducts. International Conference Chimia 2020 —New Trends In Applied Chemistry, 2021 Constanta, Romania, May 27 – 29.
11. Alexandra Virginia Bounegru (Mereșescu) , Constantin Apetrei , Irina-Georgiana (Bulgaru) Munteanu ,Ramona-Oana (Gunache) Roșca. Developement Of Biosensors For The Hydroxycinnamic Acids Analysis. Next-Chem \_ Tehnologii Inovatoare Trans-Sectoriale', Ediția A II-A, România – București 27-28 Mai 2021.
12. Alexandra Virginia Mereșescu (Bounegru), Constantin Apetrei. Enzyme sensors based on carbonaceous nanomaterials modified with cobalt phthalocyanine and lacasse used for p-coumaric acid detection in pharmaceuticals products. SCDS-UDJG 2021, Galați, 10-11 Iunie 2021.
13. Constantin Apetrei,\* Alexandra Virginia Bounegru, Irina Georgiana Munteanu, Irina Mirela Apetrei. Electrochemical sensors and biosensors based on polypyrrole for detection of phenolic compounds in olive oils. SCDS-UDJG 2021, Galați, 10-11 Iunie 2021.
14. Alexandra Virginia Bounegru, Constantin Apetrei. Development of a novel voltamperometric sensor based on carbon nanofibers and cobalt phthalocyanine for the detection of p-coumaric acid. CSAC2021: 1st International Electronic Conference on Chemical Sensors and Analytical Chemistry. 01-15.07.2021
15. Constantin Apetrei,\* , Alexandra Virginia Bounegru, Irina Georgiana Munteanu, Irina Mirela Apetrei Development of a sensitive method for the voltammetric detection of phenolic compounds in extra virgin olive oils. CSAC2021: 1st International Electronic Conference on Chemical Sensors and Analytical Chemistry. 15.07.2021
16. Alexandra Virginia Bounegru, Constantin Apetrei. Development of novel biosensor for the detection of pcoumaric acid in phenolic extracts from virgin olive oils. 31st Anniversary World Congress on Biosensors. 26-29 Iulie 2021.
17. Alexandra Virginia Bounegru, Irina Georgiana Munteanu, Constantin Apetrei Development of an electroanalytical method for detecting adulteration of extra virgin olive oils. SCDS-UDJG 2022, Galați, 9-10 Iunie 2022.
18. Alexandra Virginia Bounegru, Constantin Apetrei Sensors and Biosensors for Evaluating Olive Oil Quality. SCDS-UDJG 2022, Galați, 9-10 Iunie 2022
19. Alexandra Virginia Bounegru, Constantin Apetrei, Electrochemical determination of hydroxytyrosol in extravirgin olive oils using screen-printed electrodes modified with single wall carbon nanotubes and tyrosinase, New Trends on Sensing - Monitoring - Telediagnosis for Life Sciences NT-SMT-LS 8-10 Septembrie 2022
20. Alexandra Virginia Bounegru, Constantin Apetrei, NOI BIOSENZORI ENZIMATICI PENTRU DETERMINAREA ELECTROCHIMICĂ A OLEUROPEINEI DIN ULEIURI DE MĂSLINE EXTRAVIRGINE, Conferința Națională de Chimie,

ediția XXXVI, Călimănești-Căciulata 2022

21. C. APETREI A. V. BOUNEGRU, M. TIMOFTI, M. CĂLMUC1 ,V. CĂLMUC, C. ITICESCU , P. L. GEORGESCU. Abordări moderne ale feedbackului între procese de mediu și schimbările climatice GALAȚI, 6-9 iulie 2022
22. Veronica Filimon, Alexandra Virginia Bounegru, Simona Butan. BORON COMPOUNDS: CHALLENGES AND APPLICATIONS IN FOOD INDUSTRY. Multidisciplinary Conference on Sustainable Development, 25-26 May 2023, Timisoara
23. Ancuta Dinu (Iacob)\*, Alexandra Virginia Bounegru, Constantin Apetrei Development of a novel heavy metal ion detection electrochemical device for surface water analysis based on carbon nanofibers, UDJG 2023, Galați, 8th and 9th of June 2023
24. Constantin APETREI, IrinaGeorgiana MUNTEANU, AlexandraVirginia BOUNEGRU. Determination of antioxidant properties by spectrometric and electrochemical methods.Correlations among results. International Summer School FOOD SAFETY AND HEALTHY LIVING FSHL–2023
25. Alexandra Virginia Bounegru, Iulian Bounegru. Strategii de modificare și optimizare a senzorilor pe bază de chitosan pentru determinarea substanțelor farmaceutice. Congresul National de Farmacie, Ed. XIX, Cluj Napoca 27-29 September 2023.
26. C. Apetrei, I. G. Munteanu, A. V. Bounegru, I. M. Apetrei. Biosensors array for the detection of virgin oils adulteration with seeds oils. 24th International Conference "New Cryogenic and Isotope Technologies for Energy and Environment"-EnergEn 2023 Băile Govora, Romania, October 18–20, 2023

## Premii obținute

27. Premiul I –Sesiunea de Postere 2019. Alexandra Virginia Mereșescu (Bounegru), Constantin Apetrei. Poster: "Development of Screen-Printed Sensors Based on Carbonaceous Nanomaterials". SCDS- UDJG 2019, Galați, 13-14 Iunie 2019.
28. Medalie de bronz, 2019. Alexandra Virginia Mereșescu (Bounegru), Constantin Apetrei. Poster: Development of screen-printed sensors based on carbonaceous nanomaterials for the determination of caffeic acid. UGALINVENT, Research and Innovation Salon, Ediția a IV-a, 2019.
29. Mentjune- Sesiunea de Postere 2020. Alexandra Virginia Mereșescu (Bounegru), Constantin Apetrei. Poster: Enzyme Sensor Based on Carbon Nanofibers Modified with Gold Nanoparticle and Tyrosinase Used for Ferulic Acid Detection in Cosmetics. SCDS-UDJG 2020, Galați, 18-19 Iunie 2020.
30. Premiul II pentru articolul —Voltamperometric Sensors and Biosensors Based on Carbon Nanomaterials Used for Detecting Caffeic Acid—A Review, publicat in International Journal of Molecular Sciences la concursul pentru PREMIEREA REZULTATELOR CERCETĂRII DOCTORALALOR DE LA IOSUD- UDJG PENTRU ANUL 2020.
31. Premiul III- Sesiunea de Postere 2021. Alexandra Virginia Mereșescu (Bounegru), Constantin Apetrei. Poster: Enzyme sensors based on carbonaceous nanomaterials modified with cobalt phthalocyanine and lacasse used for p-coumaric acid detection in pharmaceuticals products. SCDS-UDJG 2021, Galați, 10- 11 Iunie 2021.
32. Food Safety and Healthy Living- International Summer School AWARD -THE MOST ACTIVE TEAM OF STUDENTS Students from —Dunareade Josil University of Galati, Romania