

Universitatea Națională de Știință și Tehnologie POLITEHNICA București
Facultatea: **Inginerie Chimică și Biotehnologii**
Departamentul: **Chimie Analitică și Ingineria Mediului**
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Gradul didactic: **Profesor universitar**

L I S T A

lucrărilor științifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

1. S. Lupu, ”*The study of the preparation and electrochemical characterisation of chemically modified electrodes*”, Universitatea din București, 20.07.2001.

Teza de abilitare

2. S. Lupu, “*Capteurs électrochimiques et matériaux nanocomposites pour la chimie analytique*”, Université de Franche-Comté, Besançon, Franța, 06.04.2012.

B. Cărți și capitole în cărți publicate în ultimii 10 ani

1. J. J. García-Guzmán, D. López-Iglesias, M. Marin, C. Lete, **S. Lupu***, J. M. Palacios-Santander*, L. Cubillana-Aguilera*, *Electrochemical Biosensors for Antioxidants*. In: *Advanced Biosensors for Health Care Applications*, Eds: Inamuddin, Raju Khan, Ali Mohammad, Abdullah M. Asiri; Elsevier, **2019**, pp. 105-146, ISBN: 978-0-12-815743-5.
2. **S. Lupu***, P.C. Balaure, C. Lete, C. Mihailciuc, *Biocomposite nanomaterials for electrochemical biosensors*, în *Handbook of Nanoelectrochemistry*, Eds: Mahmood Aliofkhaezai, Abdel Salam Hamdy Makhlouf; Springer International Publishing, **2016**, pp. 1161-1194, ISBN 978-3-319-15207-3.
3. **S. Lupu***, C. Lete, B. Lakard, J.Y. Hihn, D. Sanchez-Molas, F.J. del Campo, *Electrochemical deposition and patterning of composite nanomaterials for electrochemical sensors and biosensors*, în *Comprehensive Guide for Nanocoatings Technology, Volume 4: Application and Commercialization*, Ed: Mahmood Aliofkhaezai; Nova Science Publishers, **2015**, pp. 359-406, ISBN 978-1-63482-648-8.

C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani

1. S.A. Leau, M. Marin, A.M. Toader, M. Anastasescu, C. Matei, C. Lete, **S. Lupu***, *MeNPs-PEDOT composite-based detection platforms for epinephrine and quercetin*, *Biosensors*, 14(7), **2024**, 320.
2. S.A. Leau, I. Diaconu, C. Lete*, C. Matei, **S. Lupu***, *Electroanalysis of serotonin at platinum nanoparticles modified electrode*, *U.P.B. Sci. Bull., Series B*, 86(3), **2024**, pp. 3-14.

3. S.A. Leau, C. Lete, C. Matei, **S. Lupu***, *Electrochemical sensing platform based on metal nanoparticles for epinephrine and serotonin*, Biosensors, 13(8), **2023**, 781.
4. S.A. Leau, C. Lete, M. Marin, F.J. del Campo, I. Diaconu, **S. Lupu***, *Electrochemical sensors based on antimony tin oxide-Prussian blue screen-printed electrode and PEDOT-Prussian blue for potassium ion detection*, J. Solid State Electrochem., 27(7), **2023**, pp. 1755 - 1766.
5. S.A. Leau, C. Lete, **S. Lupu***, *Nanocomposite materials based on metal nanoparticles for the electrochemical sensing of neurotransmitters*, Chemosensors, 11(3), **2023**, 179.
6. C. Lete, D. Lopez-Iglesias, J. J. Garcia-Guzman, S.A. Leau, A.E. Stanciu, M. Marin, J. M. Palacios-Santander, **S. Lupu***, L. Cubillana-Aguilera, *A sensitive electrochemical sensor based on sonogel - carbon material enriched with gold nanoparticles for melatonin determination*, Sensors, 22(1), **2022**, 120.
7. J. J. Garcia-Guzman, D. Lopez-Iglesias, L. Cubillana-Aguilera, D. Bellido-Milla, J. M. Palacios-Santander, M. Marin, S.D. Grigorescu, C. Lete, **S. Lupu***, *Silver nanostructures - poly(3,4-ethylenedioxythiophene) sensing material prepared by sinusoidal voltage procedure for detection of antioxidants*, Electrochim. Acta, 393, **2021**, 139082.
8. A. Nakova, E. M. Anghel, C. Lete, **S. Lupu**, T. Boijadjieva-Scherzer, V. Tsakova*, *Graphite electrode-assisted electroless deposition of palladium in the absence and presence of poly(3,4-ethylenedioxythiophene) coatings*, Synth. Met. 247, **2019**, pp. 18-25.
9. D. Bottari, L. Pigani, C. Zanardi, F. Terzi, S. V. Paturca, S. D. Grigorescu, M. Cristian, C. Lete, **S. Lupu***, *Electrochemical sensing of caffeic acid using gold nanoparticles embedded in poly(3,4-ethylenedioxythiophene) layer by sinusoidal voltage procedure*, Chemosensors, 7(4), **2019**, 65.
10. V. Karabozhikova, V. Tsakova, C. Lete, M. Marin, **S. Lupu***, *Poly(3,4-ethylenedioxythiophene)-modified electrodes for tryptophan voltammetric sensing*, J. Electroanal. Chem., 848, **2019**, 113309.
11. C. Lete, M. Marin, E. M. Anghel, L. Preda, C. Matei, **S. Lupu***, *Sinusoidal voltage electrodeposition of PEDOT-Prussian blue nanoparticles composite and its application to amperometric sensing of H₂O₂ in human blood*, Mater. Sci. Eng. C-Materials for Biological Applications, 102, **2019**, pp. 661-669.
12. J. J. Garcia-Guzman, D. Lopez-Iglesias, L. Cubillana-Aguilera, C. Lete, **S. Lupu***, J. M. Palacios-Santander, D. Bellido-Milla, *Assessment of the polyphenol indices and antioxidant capacity for beers and wines using a tyrosinase-based biosensor prepared by sinusoidal current method*, Sensors, 19(1), **2019**, 66.

13. J. J. García Guzmán, L. Cubillana Aguilera, D. Bellido Milla, I. Naranjo Rodríguez, C. Lete*, J. M. Palacios Santander*, **S. Lupu***, *Development of sonogel-carbon based biosensors using sinusoidal voltages and currents methods*, Sens. Actuat. B: Chem., 255, **2018**, pp. 1525-1535.
14. M. Bem, R. Baratoiu, C. Radutiu, C. Lete, S. Mocanu, G. Ionita, **S. Lupu**, M.T. Caproiu, A.M. Madalan, B. Patrascu, I. Zarafu, P. Ionita, *Synthesis and structural characterization of some novel methoxyamino derivatives with acid-base and redox behavior*, J. Molecular Structure, 1173, **2018**, pp. 291-299.
15. C. Lete, B. Lakard, J.-Y. Hihn, F. J. Del Campo, **S. Lupu***, *Use of sinusoidal voltages with fixed frequency in the preparation of tyrosinase based electrochemical biosensors for dopamine electroanalysis*, Sens. Actuat B: Chem., 240, **2017**, pp. 801-809.
16. A. J. Shakir, A. Madalan, G. Ionita, **S. Lupu**, C. Lete, P. Ionita*, *A comparison between nitroxide and hydrazyl free radicals in selective alcohols oxidation*, Chemical Physics, 490, **2017**, pp. 7-11.
17. C. Lete, D. Berger, C. Matei, **S. Lupu***, *Electrochemical and microgravimetric studies of poly[3,4-ethylenedioxythiophene]-tyrosinase biocomposite material electrodeposited onto gold electrodes by a sinusoidal voltages method*, J. Solid State Electrochem., 20 (11), **2016**, pp. 3043–3051.
18. **S. Lupu***, C. Lete, F. Javier Del Campo, *Dopamine electroanalysis using electrochemical biosensors prepared by a sinusoidal voltages method*, Electroanalysis, 27 (7), **2015**, pp. 1649-1659.
19. C. Lete, **S. Lupu***, B. Lakard, J.-Y. Hihn, F. J. Del Campo, *Multi-analyte determination of dopamine and catechol at single-walled carbon nanotubes - conducting polymer - tyrosinase based electrochemical biosensors*, J. Electroanal. Chem. 744, **2015**, pp. 53-61.
20. C. Lete, F. Teodorescu, E. M. Anghel, **S. Lupu**, T. Spataru, *The influence of supporting electrolyte on the electrochemical properties of copolymer films based on azulene and 3-thiophene acetic acid*, J. Solid State Electrochemistry, 19 (6), **2015**, pp 1875-1883.

D. Lucrări publicate în ultimii 10 anii în reviste și volume de conferințe cu referenți

1. S.-A. Leau, C. Lete, I. Diaconu, C. Matei, **S. Lupu***, *Electrochemical sensing of neurotransmitters using a metal nanoparticle-based composite platform*, The 4th International Electronic Conference on Biosensors IECB 2024, online, 20-22 mai **2024**; comunicare orală.
2. M. Marin, S.-A. Leau, C. Lete*, **S. Lupu**, *Novel platforms for electrochemical sensing of antioxidant compounds*, The 4th International Electronic Conference on Biosensors IECB 2024, online, 20-22 mai **2024**; poster.
3. **S. Lupu***, *Novel methods in the development of sensing materials for electrochemical (bio)sensors*, The 3rd International Electronic Conference on Biosensors IECB 2023, online, 8 – 21 mai, **2023**; conferinta invitata keynote.

4. S.-A. Leau, C. Lete, C. Matei, **S. Lupu***, *PEDOT-Au NPs nanocomposite modified glassy carbon electrode for epinephrine sensing*, International Conference of Physical Chemistry ROMPHYSICHEM 17, 25 – 27 septembrie, **2023**, București, România, comunicare orală.
5. S.-A. Leau, C. Lete, **S. Lupu***, *Development of sensing materials based on PEDOT and PtNPs for analytical applications*, 22nd Romanian International Conference on Chemistry and Chemical Engineering, 7 – 9 septembrie, **2022**, Sinaia, Romania, comunicare orală.
6. C. Lete, M. Marin, F.J. del Campo, I. Diaconu, **S. Lupu***, , *Antimony tin oxide – Prussian blue screen-printed electrodes for electrochemical sensing of potassium ions*, The 1st International Electronic Conference on Chemical Sensors and Analytical Chemistry, 1-15 iulie, **2021**, poster, <https://doi.org/10.3390/CSAC2021-10639>.
7. J.J. García Guzmán, D. López Iglesias, L. Cubillana Aguilera, D. Bellido-Milla, J.M. Palacios Santander, M. Marin, C. Lete, **S. Lupu***, *Conducting polymer - silver nanoparticles composite material: a novel sensing element for antioxidants electroanalysis*, International Conference “New Trends on Sensing-Monitoring-Telediagnosis for Life Sciences”– NT SMT–LS 2020, 3-4 iulie, **2020**, online, p.4.11. ISBN: 978-606-19-1266-7, poster.
8. V. Karabozhikova, V. Tsakova, C. Lete, M. Marin, **S. Lupu***, *Sensitive electrochemical detection of lipoic acid at conducting polymer modified electrode*, International Conference “New Trends on Sensing-Monitoring-Telediagnosis for Life Sciences”– NT SMT–LS 2020, 3-4 iulie, **2020**, online, p.4.12. ISBN: 978-606-19-1266-7, poster.
9. V. Karabozhikova, C. Lete, **S. Lupu**, V. Tsakova, *Electroanalytical determination of caffeic acid and tryptophan on PEDOT-modified electrodes*, International Workshop on Electrochemistry of Electroactive Materials, 16-21 iunie, **2019**, Borovets, Bulgaria, pp. 49-50, comunicare orală.
10. A. Nakova, M. Ilieva, E. M. Anghel, C. Lete, **S. Lupu**, Tz. Boijadjieva-Scherzer, V. Tsakova, *Electroless deposition of palladium on poly(3,4-ethylenedioxythiophene) - coated graphite electrodes*, International Workshop on Electrochemistry of Electroactive Materials, 16-21 iunie, **2019**, Borovets, Bulgaria, pp. 128-129, poster.

E. Brevete obținute în întreaga activitate