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L I S T A

lucrărilor științifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

Obținerea de electrozi modificați și utilizarea acestora la studiul diferitelor procese de electrod

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

1. Luisa Pilan, Matei Raicopol, “*Electrochemical DNA Biosensors Based on Carbon Nanomaterials*” – capitol in *Carbon Related Materials*, Springer Nature Singapore Pte Ltd., p. 209-247, doi: 10.1007/978-981-15-7610-2_10, ISBN: 978-981-15-7609-6, publicat online octombrie 2020.
2. Sima, S., Cotarta, A., Mihaly, M., Secuianu, C., Manea, A.C., Crisciu, A.V., Istrate, O., Pilan, L., Ungureanu, E.M., Ferioiu, V., *Lucrari practice de laborator pentru Chimie Fizica*, Bucharest, Ed. Politehnica Press, 2017, ISBN 978-606-515-747-7.

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

1. (ISI) Andra Mihaela Onaș, Constanta Dascălu, Matei D. Raicopol, Luisa Pilan, *Critical Design Factors for Electrochemical Aptasensors Based on Target-Induced Conformational Changes: The Case of Small-Molecule Targets*, Biosensors 12 (10), 816, DOI: 10.3390/bios12100816,
2. (ISI) Luisa Pilan, *Tailoring the performance of electrochemical biosensors based on carbon nanomaterials via aryldiazonium electrografting*, Bioelectrochemistry, 2021, online Noiembrie 2020, doi: 10.1016/j.bioelechem.2020.107697.
3. (ISI). M. Raicopol, Luisa Pilan, *The Role of Aryldiazonium Chemistry in Designing Electrochemical Aptasensors for the Detection of Food Contaminants*, Materials 14(14) 2021, DOI: 10.3390/ma14143857
5. (ISI). EA Chiticaru, Luisa Pilan, CM Damian, E Vasile, JS Burns, M Ioniță, *Influence of Graphene Oxide Concentration when Fabricating an Electrochemical Biosensor for DNA Detection*, Biosensors **2019**, 9 (4), 113.
6. (ISI). G.M. Vlăsceanu, R.M. Amărăndi, M. Ioniță, T. Tite, H. Iovu, Luisa Pilan, J.S. Burns, *Versatile Graphene Biosensors for Enhancing Human Cell Therapy*, Biosensors and Bioelectronics **2018**, 117, p. 283-302.

7. (ISI). C. Ott, M.D. Raicopol, C. Andronescu, E. Vasile, A. Hanganu, A. Pruna, Luisa Pilan, *Functionalized polypyrrole/sulfonated graphene nanocomposites: Improved biosensing platforms through aryl diazonium electrochemistry*, *Synthetic Metals* **2018**, 235, 20-18.
8. (ISI). Ciocirlan, D.A. Berinde, Luisa Pilan, E.M. Ungureanu, *Cobaltocenium diffusion coefficients evaluation by electrochemistry in acetonitrile and dimethyl sulfoxide*, *UPB Scientific Bulletin, Series B: Chemistry and Materials Science* **2017**, 79(4):195-208.
9. (ISI). M. Raicopol, C. Andronescu, R. Atasiei, A. Hanganu, E. Vasile, A.M. Brezoiu, Luisa Pilan, *Organic layers via aryl diazonium electrochemistry: towards modifying platinum electrodes for interference free glucose biosensors*, *Electrochimica Acta* **2016**, 206, 226-237, ISSN: 0013-4686, DOI: 10.1016/j.electacta.2016.04.145.
10. (ISI) Matei Raicopol, I. Vlăsceanu, I. Lupulescu, A.M. Brezoiu, Luisa Pilan, *Amperometric glucose biosensors based on functionalized electrochemically reduced graphene oxide*, *UPB Scientific Bulletin, Series B: Chemistry and Materials Science* **2016**, vol. 78, Iss. 2, p. 131-142.
11. (ISI). M. Raicopol, C. Andronescu, R. Atasiei, A. Hanganu, A.M. Manea, I Rău, F. Kajzar, Luisa Pilan, *Synthesis of conducting azopolymers by electrochemical grafting of a diazonium salt at polypyrrole electrodes*, *Synthetic Metals*, **2015**, 206, 84-91, ISSN: 0379-6779, DOI: 10.1016/j.synthmet.2015.05.006, WOS: 000357548600011.
12. (ISI). M. Raicopol, C. Andronescu, R. Atasiei, A. Hanganu, Luisa Pilan, *Post-Polymerization Electrochemical Functionalization of a Conducting Polymer: Diazonium Salt Electroreduction at Polypyrrole Electrodes*, *Journal of the Electrochemical Society*, **2014**, 161, G103-G113, ISSN: 0013-4651, DOI: 10.1149/2.0871412jes, WOS: 000357617800014.
13. (ISI). Istrate, A; Aprodu, I; Banu, I; Vasile, E.; Luisa Pilan; Ionita, M - Single Molecule Level Investigations on Bone Morphogenetic Proteins Binding to Graphene, *Digest Journal of Nanomaterials and Biostructures* **2014**, 9 (4), 1399, WOS: 000312709300044.
14. (BDI) Luisa Pilan, M. Raicopol, *Highly selective and stable glucose biosensors based on polyaniline/carbon nanotubes composites*, *UPB Scientific Bulletin, Series B: Chemistry and Materials Science* **2014**, 76(1), p. 155-166, ISSN 1454-2331.
15. (ISI) M.Ionita, A.M. Pandeale, L. Crica, Luisa Pilan, *Improving the thermal and mechanical properties of polysulfone by incorporation of graphene oxide*, *Composites Part B: Engineering* **2014**, 59, p. 133-139, DOI: 10.1016/j.compositesb.2013.11.018, WOS:000331019700015, ISSN: 1359-8368, eISSN: 1879-1069.
16. (ISI) M. Raicopol, A. Prună, C. Damian, Luisa Pilan, *Functionalized Single-Walled Carbon Nanotubes/Polypyrrole Composites for Amperometric Glucose Biosensors*, *Nanoscale Research Letters* **2013**, 8:316, DOI: 10.1186/1556-276X-8-316, WOS:000322020500001, ISSN: 1931-7573.
17. (ISI) S.I. Voicu, M.A. Pandeale, E. Vasile, R. Rughinis, L. Crica, Luisa Pilan, M. Ioniță, *The impact of sonication time through polysulfone-graphene oxide composite films properties*, *Digest Journal of Nanomaterials and Biostructures* **2013**, 8(4), WOS:000327818000005, ISSN: 1842-3582.
18. (ISI) M. Raicopol, A. Prună, Luisa Pilan, *Supercapacitance of Single-Walled Carbon Nanotubes-Polypyrrole Composites*, *Journal of Chemistry* **2013**, article ID 367473, 7 pages, doi:10.1155/2013/367473, WOS:000323986100001, ISSN: 2090-9063.
19. (ISI) Luisa Pilan, M. Raicopol, A. Pruna, V. Branzoi, *Polyaniline/carbon nanotube composite films electrosynthesis through diazonium salts electroreduction and electrochemical polymerization*, *Surface and Interface Analysis* **2012** 44 (8), p. 1198 – 1202, WOS:000306662600068, ISSN: 0142-2421.
20. (ISI) M. Raicopol, L. Necula, M.Ioniță, Luisa Pilan, *Electrochemical reduction of aryl diazonium salts: A versatile way for carbon nanotubes functionalisation*, *Surface and Interface Analysis* **2012** 44 (8), p. 1081-1085, DOI: 10.1002/sia.4830, WOS:000306662600046, ISSN: 0142-2421.
21. (ISI) Luisa Pilan, M. Raicopol, M. Ioniță, V. Brânzoi, *Electrochemical Study on Carbon Nanotubes Functionalization by Diazonium Salts Electroreduction*, *Rev. Roum. Chim.* **2012**, 57(9-10), p. 815-822, WOS:000320072300005, ISSN: 0035-3930.

- 22. (ISI)** M. Raicopol, V. Brânzoi, L. Necula, M. Ioniță, Luisa Pilan, *Comparative studies on the redox reaction of $Fe(CN)_6^{4-/3-}$ at modified glassy carbon electrodes via diazonium salts electroreduction*, Rev. Roum. Chim., **2012**, 57(9-10), p. 807-814, WOS:000320072300004, **ISSN:** 0035-3930.
- 23. (ISI)** Luisa Pilan, M. Raicopol, E. Vasile, M. Ionita, *The effect of incorporation of different carbon nanotubes on the properties of polypyrrole nanocomposite - Molecular modeling and experimental investigation*, Digest Journal of Nanomaterials and Biostructures **2012** 7 (3), p. 1253-1262, WOS:000312709300044, **ISSN:** 1842-3582.
- 24. (ISI)** A. Pruna, Luisa Pilan, *Electrochemical study on new polymer composite for zinc corrosion protection*, Composites Part B: Engineering **2012**, 43 (8), p. 3251-3257, DOI: 0.1016/j.compositesb.2012.02.041, WOS:000310403600043, **ISSN:** 1359-8368.
- 25. (ISI)** Luisa Pilan, M. Raicopol, M. Ionita, *Fabrication of polyaniline/carbon nanotubes composites using carbon nanotubes films obtained by electrophoretic deposition*, Key Engineering Materials, 507, p.113-117, WOS:000308567500019, **ISSN:** 1013-9826, 2012.
- 26. (ISI)** Luisa Pilan, M. Raicopol, C. Damian, M. Ionita, *Electrochemical functionalization of single-walled carbon nanotubes films obtained by electrophoretic deposition*, Key Engineering Materials, 507, p.107-111, WOS:000308567500018, **ISSN:** 1013-9826, 2012.
- 27. (BDI)** M. Raicopol, A. Pruna, Luisa Pilan, *Supercapacitance of Single-Walled Carbon Nanotube-Polyaniline Composites*, Proceedings of 15th European Conference on Composite Materials 2012, Veneția, Italia.

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Semnătura:

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