

Universitatea Națională de Știință și Tehnologie POLITEHNICA București
Facultatea de **Inginerie Chimică și Biotehnologii**
Departamentul de **Chimie Anorganică, Chimie Fizică și Electrochimie**
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L I S T A
lucrărilor științifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

Obținerea de electrozi modificali și utilizarea acestora la studiul diferitelor procese de electrod, noiembrie 2004.

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, 2020.
2. Sima, S., Cotarta, A., Mihaly, M., Secuianu, C., Manea, A.C., Crisciu, A.V., Istrate, O., Pilan, L., Ungureanu, E.M., Feroiu, 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) A.M. Onaș, A.M. Pandele, A. Hanganu, C. Florea, H. Iovu, M. D. Raicopol, L. Pilan, *Facile preparation of bifunctional monolayers through diazonium grafting and “click” postfunctionalization: A first step towards efficient aptasensing interfaces*, *Bioelectrochemistry* 163, 2025, 108904.
2. (ISI) A.M. Onaș, A.M. Pandele, A. Hanganu, C. Florea, G. Marton, H. Iovu, M. D. Raicopol, **L. Pilan**, *Controlled surface functionalization using aryldiazonium salts with bulky protecting groups for the development of DNA-based sensing platforms*, *Surfaces and Interfaces* 46, 2024, 103855, DOI 10.1016/j.surfin.2024.103855.
3. (ISI) E.A. Chiticaru, C.M. Damian, **Luisa Pilan**, and M. Ioniță, *Label-Free DNA Biosensor Based on Reduced Graphene Oxide and Gold Nanoparticles* *Biosensors* 13, no. 8: 797, 2023, <https://doi.org/10.3390/bios13080797>
4. (ISI) A.M. Onaș, C. Dascălu, M.D. Raicopol, **Luisa Pilan**, *Critical Design Factors for Electrochemical Aptasensors Based on Target-Induced Conformational Changes: The Case of Small-Molecule Targets*, *Biosensors*, 2022, 12(10), 816.
5. (ISI) Elena Chiticaru, **Luisa Pilan**, Mariana Ioniță *Electrochemical Detection Platform Based on RGO Functionalized with Diazonium Salt for DNA Hybridization*, *Biosensors* 12, no. 1: 39. <https://doi.org/10.3390/bios12010039>, 2022.
6. (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.
7. (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

8. (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.
9. (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.
10. (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.
11. (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.
12. (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.
13. (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.
14. (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.