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Articole de rang A:

1. M. C. Radulescu, M. P. Bucur, **B. Bucur**, A. Iosageanu, G. L. Radu: "*4-Phenyl isothiocyanate modified electrode based on diazonium electrodeposition for heavy metals detection in pharmaceuticals*" Talanta, 295, 128339 (2025). DOI: 10.1016/j.talanta.2025.128339

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Brevete nationale

1. Cerere brevet A00231/10.06.2025 C. Radulescu, M.P. Bucur, **B. Bucur**, G.L. Radu: „*Electrozi screen-printati de aur modificati prin electrodepunere cu un strat organic de grupari isotiocianat pentru analiza sensibila a ionilor de fier (II) si plumb (II)"*
2. Patent RO33210B1/2022 E. A.-M Rusen, A. Diacon, A. Mocanu, E. Bacalum, M. Cheregi, V. David, **B. Bucur**, P.M. Bucur, G.L. Radu:. „*Polimer imprentat molecular, obţinut prin polimerizare în masă pentru nitrofurantoină pentru realizarea de coloane de extractive în faza solidă şi senzori electrochimici*"
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1. M.P. Bucur, M.C. Radulescu, **B. Bucur**, A. Teban-Man, M.D. Nicoara, H. L. Banciu, G. L. Radu: "*Bienzymatic biosensors for electrochemical screening of neurotoxic compounds based on acetylcholinesterase and butyrylcholinesterase*", XXIX Transfrontier Meeting on Sensors and Biosensors (TMSB 2025), Tarragona, Spain, 18-19 September 2025
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3. P. Bucur, **B. Bucur**, Gabriel Lucian Radu: "*Fast detection of acrylamide based on amperometric measurements using glutathione S-transferase*", 8th international workshop on biosensors for food safety and environmental monitoring, Rabat-Morocco- October 12 - 14, 2017
4. M. C. Radulescu, M. P. Bucur, **B. Bucur**, G. L. Radu: "*Stable Prussian blue-copper modified (micro)electrodes for sensitive enzymatic biosensors based on oxidases*", 7th International Workshop on Biosensors for Food Safety and Environmental Monitoring, Erfoud, Morocco, November 19 - 21, 2015
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11. O. I. Covaci, **B. Bucur**, Gabriel Lucian Radu: "*Cholinesterase Immobilization on Pt Microelectrodes Based on Diazonium Chemistry*", XV Rencontre Transfrontalière Capteurs et Biocapteurs, 16-17 Sept. 2010, Sant Carles de la Ràpita, Spain

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1. B. Bucur, M.C. Radulescu, M.P. Bucur, G. L. Radu: "*Electrochemical sensors based on phenyl isothiocyanate diazonium salts for toxic compounds detection in complex samples*", XXII European Conference on Analytical Chemistry Euroanalysis, 01-04.09.2025, Barcelona, Spain

2. M.P. Bucur, M.C. Radulescu, **B. Bucur**, A. Teban-Man, M. D. Nicoara, H. L. Banciu, G. L. Radu: "*Acetylcholinesterase and butyrylcholinesterase bienzymatic biosensors for electrochemical screening of neurotoxic compounds*", 35th Anniversary World Congress on Biosensors, 18-24.05.2025, Lisabona, Portuga

3. M.P. Bucur, M.C. Radulescu, **B. Bucur**, A. Teban-Man, M. D. Nicoară, H. L. Banciu, G. L. Radu: "*Acetylcholinesterase and butyrylcholinesterase bienzymatic biosensors for electrochemical screening of neurotoxic compounds*", 35th Anniversary World Congress on Biosensors, 18-24.05.2025 la Lisabona, Portugalia

4. M.C. Radulescu, M.P. Bucur, **B. Bucur**, G. L. Radu: "*Electrochemical method for dopamine and dopamine sulfate discrimination based differential measurements with a bioelectrode system using an arylsulfatase biosensor*", 35th Anniversary World Congress on Biosensors, 18-24.05.2025 la Lisabona, Portugalia

5. M.P. Bucur, M.C. Radulescu, **B. Bucur**, G. L. Radu: "*Insecticides screening using biosensor with co-immobilized acetylcholinesterase and butyrylcholinesterase*", Littoral24 - the 17th EUCC Conference, 4-27.09.2024, Constanta, Romania

6. M.P. Bucur, M.C. Radulescu, G. L. Radu, **B. Bucur**: "*Cholinesterase Biosensor for neurotoxin monitoring based on highly stable Prussian blue-copper mediator electrodeposited on diazonium modified surfaces*", ISEAC-41 International Conference on Environmental & Food Monitoring, 20-24 November 2023, Amsterdam

7. **B. Bucur**, C. Purcarea, A. Vasilescu:" *Selectivity improvement of the inhibition-based biosensors. application to aldehyde dehydrogenase-based detection of thiram*", poster, XVIIIth International Symposium PRIOCHEM "Priorities of Chemistry for a Sustainable Development" October 26-28, 2022, Bucharest, Romania

8. M.P. Bucur, **B. Bucur**, G.L. Radu: "*Immobilization of cholinesterase in sol-gel protective microporous matrix for insecticide detection in organic-solvents mixtures*", Electrochemistry for Nano & Nano for Electrochemistry ElecNano8, 29-31 May 2018, Nancy, France

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10. A. Chira, **B. Bucur**, M. P. Bucur, G. L. Radu: "*Electrode-modified with nanoparticles composed of 4,4'-bipyridine-silver coordination polymer for sensitive determination of Hg(II), Cu(II) and Pb(II)*" , 8th International Workshop on Surface Modification for Chemical and Biochemical Sensing – SMCBS'2017, Zelechów, Poland, November 3-7, 2017

11. Radulescu M.C., **Bucur B.**, Bucur M.P., Radu G.L.: "*Amperometric biosensor for the determination of aspartame in soft drinks*", Simpozionul International Prioritatile chimiei pentru o dezvoltare durabila Priochem *IX*, Bucharest, Romania, Octomber 30-31, 2013

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