

ARTICLES PUBLISHED DURING THE DOCTORAL THESIS

1. **Enache, L.-B.**; Anăstăsoaie, V.; Birzan, L.; Ungureanu, E.-M.; Diao, P.; Enachescu, M. *Polyazulene-Based Materials for Heavy Metal Ion Detection*. 2. *(E)-5-(azulen-1-yl)diazanyl)-1H-Tetrazole-Modified Electrodes for Heavy Metal Sensing*. *Coatings* 2020, 10, 869, FI = 2.436, SRI = 1.
2. Stefaniu, A.; Pirvu, L.; Ungureanu, E.-M.; Birzan, L.; Stanciu, G.; **Enache, L.-B.**; Anastasoiaie, V. *Virtual Screening of Compounds by Chemoinformatics Tools in the Chemistry Labs*. *Proceedings* 2020, 55, 9.
3. Păun, A.-M.; Matica, O.-T.; Anăstăsoaie, V.; **Enache, L.-B.**; Diacu, E.; Ungureanu, E.-M. *Recognition of Heavy Metal Ions by Using E-5-((5-Isopropyl-3,8-Dimethylazulen-1-yl) Dyazenyl)-1H-Tetrazole Modified Electrodes*. *Symmetry* 2021, 13, 644, FI = 2.645, SRI = 0.579.
4. Moise, C.-C., **Enache, L.-B.**; Anastasoiaie V.; Lazar, O. A.; Mihai, G., V.; Rosoiu, S., P.; Bercu, M.; and Enachescu, M. *On the growth of copper oxide nanowires by thermal oxidation near the threshold temperature at atmospheric pressure*. *Journal of Alloys and Compounds*, 2021, 161130, FI = 5.316, SRI = 2.545.
5. **Enache, L.-B.**; Anăstăsoaie, V.; Lete, C.; Brotea, A. G.; Matica, O.-T.; Amarandei, C. A.; Brandel, J.; Ungureanu, E.-M.; Enachescu, M. *Polyazulene-Based Materials for Heavy Metal Ions Detection*. 3. *(E)-5-((6-t-butyl-4,8-dimethylazulen-1-yl) di-azanyl)-1H-tetrazole based modified electrodes*. *Symmetry* 2021, 13, 1642, FI = 2.713, SRI = 0.579.
6. Bucureşteanu, R.; Ditu, L.-M.; Ionita, M.; Calinescu, I.; Rădiţoiu, V.; Cojocaru, B. E.; Cinteza, L., O.; Curutiu, C.; Holban, A.-M.; Enachescu, M.; **Enache, L.-B.**; Mustatea, G.; Chihaiia, V.; Nicolaev, A.; Borcan, L. E.; *Mihăescu, G.; Preliminary Study on Light-Activated Antimicrobial Agents as Photocatalytic Method for Protection of Surfaces with Increased Risk of Infections*. *Materials*, 2021, 14(18), 5307; FI = 3.623, SRI = 2.113.
7. Anăstăsoaie, V.; Omocea, C.; **Enache, L.-B.**; Anicai, L.; Ungureanu, E.-M. and Enachescu, M. *Surface Characterization of New Azulene-based CMEs for Sensing*. *Symmetry* 2021, 13, 2292, FI = 2.713, SRI = 0.579.
8. Lazăr, O. A.; Moise, C. C.; Nikolov, A. S.; **Enache, L.-B.**; Mihai, G. V.; Enăchescu, M., *Water-based Synthesis of Platinum Nanoparticles using KrF Excimer Laser Ablation*, *Nanomaterials* 2022. FI = 5.076, SRI = 1,687.
9. Păun, A.-M.; Matica, O.-T.; **Enache, L.-B.**; Diacu, E.; Ungureanu, E.-M. and Enăchescu, M., *Studies to Improve the Performance of Chemically Modified Electrodes Based on E-5-((5-ISOPROPYL-3,8-DIMETHYLAZULEN-1-YL) DIAZENYL)-1H-TETRAZOLE for Heavy Metal Ions Analysis*, *Sci. Bull., U.P.B. Sci. Bull., Series B*, in press, FI = 0.

SCIENTIFIC COMMUNICATIONS DURING THE DOCTORAL THESIS

1. **Laura-Bianca Enache**, Geanina Mihai, Oana Lazar, Sabrina Rosoiu, Aida Ghiulnare Pantazi, Calin Moise, Angelo Alberto Messina and Marius Enachescu, *Stress analysis by XRD and Raman on different semiconductor substrates*, 9th International Congress on Microscopy & Spectroscopy (INTERM), 21-29 apr 2022, Poster, Oludeniz, Turcia.
2. Veronica Anastasoiaie, Cristian Omocea, **Laura-Bianca Enache**, Eleonora-Mihaela Ungureanu, *Azulen-thiadiazole modified electrodes for heavy metal sensing*, 44th International Semiconductor Conference (CAS), 6 - 8 October 2021, online, student paper, Prezentare orală.
3. Veronica Anastasoiaie, **Laura-Bianca Enache**, Magdalena Rodica Bujduveanu, Eleonora-Mihaela Ungureanu, Liviu Birzan, Marius Enachescu, *Evidence of Lead Ions Detection on Azulene Based CMEs by Voltammetry*, 71st Annual Meeting of the

- International Society of Electrochemistry, Symposium 14 D (smart electroactive molecules), 31 Aug – 01 Sep 2020, Belgrade, Online, Poster (D7).
4. Eleonora-Mihaela Ungureanu, Veronica Anastasoae, **Laura-Bianca Enache**, Liviu Birzan, Marius Enachescu, *Azulene Azotetrazoles Modified Electrodes for Heavy Metal Ions Detection*, 71st Annual Meeting of the International Society of Electrochemistry, Symposium 14 D (smart electroactive molecules), 31 Aug – 01 Sep 2020, Belgrade, Online, Presentare orală, Lecture (D6).
 5. Amalia Stefaniu, Lucia Pirvu, Eleonora-Mihaela Ungureanu, Liviu Birzan, Gabriela Stanciu, **Laura-Bianca Enache**, Veronica Anastasoae, *Virtual screening of compounds by chemoinformatics tools in the chemistry labs*, Virtual Scientific Workshop Eurachem 2020, 14-15 July 2020, Poster.
 6. Geanina Mihai, Calin Moise, Oana Lazar, Veronica Anastasoae, **Laura-Bianca Enache**, Sabrina Rosoiu, Maria Vardaki, Aida Pantazi, Marius Enachescu, *GaN NANOSTRUCTURING*, The 5th International Conference New Trends on Sensing - Monitoring - Telediagnosis for Life Sciences NT-SMT-LS 2020, 3-4 Iulie NOMARES, București, România, ONLINE, Presentare orală O.4.3.
 7. Oana Lazar, Calin Moise, Geanina Mihai, **Laura-Bianca Enache**, Aida Pantazi, Marius Enachescu, *Heavy Metals Ions Detection on Azulene-Azothiadiazole Based CMEs*, The 5th International Conference New Trends on Sensing - Monitoring - Telediagnosis for Life Sciences NT-SMT-LS NOMARES, 3-4 Iulie 2020, București, România, ONLINE, Poster, Presentare orală O.4.6. – **premiul I pentru cea mai bună prezentare orală.**
 8. Veronica Anastasoae, **Laura-Bianca Enache**, Magdalena-Rodica Bujduveanu, Eleonora-Mihaela Ungureanu, Liviu Birzan, Marius Enachescu, *Heavy Metals Ions Detection On Azulene-Azothiadiazole Based CMEs*, The 5th International Conference New Trends on Sensing - Monitoring - Telediagnosis for Life Sciences NT-SMT-LS NOMARES, 3-4 Iulie 2020, București, România, ONLINE, Poster P.4.1. – **premiul I pentru cel mai bun poster.**
 9. Cristian Omocea, Eleonora-Mihaela Ungureanu, Liviu Birzan, Veronica Anastasoae, **Laura-Bianca Enache**, Marius Enachescu, *Detection Of Lead Ions By Voltammetry on Azulene Based CMEs*, The 5th International Conference New Trends on Sensing - Monitoring - Telediagnosis for Life Sciences NT-SMT-LS NOMARES, 3-4 Iulie 2020, București, România, ONLINE, Poster P.4.15.
 10. **Laura-Bianca Enache**, Veronica Anastasoae, Liviu Birzan, Marius Enachescu, Gabriela Stanciu, Eleonora-Mihaela Ungureanu, *(E)-5-(Azulen-1-Yldiazenyl)-1h-Tetrazole Modified Electrodes for Heavy Metal Sensing*, The 5th International Conference New Trends on Sensing - Monitoring - Telediagnosis for Life Sciences NT-SMT-LS NOMARES, 3-4 Iulie 2020, București, România, ONLINE, Poster P.4.9.
 11. **Laura-Bianca Enache**, Veronica Anastasoae, Liviu Birzan, Eleonora-Mihaela Ungureanu, Marius Enachescu, *Surface and Electrochemical Techniques for Characterization of Azulene Azotetrazoles and Heavy Metal Ions Detection*, 21st Romanian International Conference on Chemistry and Chemical Engineering, Constanta, Romania, Section 3 - Physical Chemistry; Electrochemistry & Corrosion, Poster (S3-159), 4th-7th September 2019.
 12. Cristian Omocea, Eleonora-Mihaela Ungureanu, Liviu Birzan, Veronica Anastasoae, **Laura-Bianca Enache**, Marius Enachescu, *Detection of lead ions by voltammetry on azulene based CMEs*, 21st Romanian International Conference on Chemistry and Chemical Engineering, Constanta, Romania, Section 3 - Physical Chemistry; Electrochemistry & Corrosion, Poster (S3-367), 4th-7th September 2019.
 13. Veronica Anastasoae (University Politehnica of Bucharest, Romania), Mariana Apostoiu (Popescu), **Laura-Bianca Enache**, Liviu Birzan, Eleonora-Mihaela Ungureanu, Marius Enachescu *Azulene-azothiadiazoles ligands for heavy metals*

- detection using CME*, 21st Romanian International Conference on Chemistry and Chemical Engineering, Constanta, Romania, Section 3 - Physical Chemistry; Electrochemistry & Corrosion, Poster (S3-158), 4th-7th September 2019.
14. **Laura-Bianca Enache**, Veronica Anastasoae, Liviu Birzan, Eleonora-Mihaela Ungureanu, Marius Enachescu, *Electrochemical Properties of Modified Electrodes Based On Azulene-Tetrazoles*, 9th International Conference of the Chemical Societies of the South-East European Countries, May 8th – 11th, 2019, Targoviste, Romania, Section 4, Physical, structural chemistry, spectroscopy and electrochemistry, Poster (S4_P_17).
 15. **Laura-Bianca Enache**, Calin Moise, Veronica Anastasoae, Geanina Mihai, Oana Lazar, Eleonora-Mihaela Ungureanu, Liana Anicai, Marius Enachescu, *Platinum Nanoparticles as Smart Catalyst Synthesized by Krf Laser Ablation in Liquids*, 9th International Conference of the Chemical Societies of the South-East European Countries, May 8th – 11th, 2019, Targoviste, Romania, Section 1, Analytical and environmental chemistry, Poster (S1_P_31).
 16. Veronica Anastasoae, Mariana Apostoiu Popescu, **Laura-Bianca Enache**, Liviu Birzan, Eleonora-Mihaela Ungureanu, Marius Enachescu, *Comparison of Electrochemical Properties of Azulene-Azothiodiazoles*, 9th International Conference of the Chemical Societies of the South-East European Countries, May 8th – 11th, 2019, Targoviste, Romania, Section 4, Physical, structural chemistry, spectroscopy and electrochemistry, Prezentare orală (S4_OP_02).
 17. Veronica Anăstasoae, **Laura-Bianca Enache**, Cristian Omocea, Liviu Bîrzan, Raluca Isopescu, Eleonora-Mihaela Ungureanu, *Electrochemical behaviour of new (azulen-1-yl-diazanyl)-heteroaromatic compounds containing 1,2,5-thiadiazol-3-yl moieties*, 7th RSE-SEE, Split, Croatia, 2019, poster (EAS-P-13).
 18. V. Anăstasoae, **Laura-Bianca Enache**, M. Cristea, R. Isopescu, G. Stanciu, Eleonora-Mihaela Ungureanu, *Electrochemical properties of substituted thioxothiazolidin-azulene*, 7th RSE-SEE, Split, Croatia, 2019, Prezentare orală (ORG-4).