

Universitatea Națională de Știință și Tehnologie POLITEHNICA București
Facultatea: Facultatea de Inginerie Chimică și Biotehnologii
Departamentul: Bioresurse și Știința Polimerilor
Nume Prenume: Bîru Elena Iuliana
Gradul didactic: Șef de lucrări

L I S T A

lucrărilor științifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

Polybenzoxazine – Based Hybrid Composite Materials, 2020

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

B1. Elena Iuliana Bîru, Horia Iovu, *Graphene Nanocomposites Studied by Raman Spectroscopy*, InTECH, 2018, <http://dx.doi.org/10.5772/intechopen.73487>

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

1. Corina Andronescu, **Elena Iuliana Bîru**, Ionuț, Cristian Radu, Sorina Alexandra Gârea, Horia Iovu, *Kinetics of benzoxazine polymerization studied by Raman spectroscopy*, **High Performance Polymers**, 25(6), 634–640, 2013, ISI (WOS=000323431500003, IF= 1,045, ISSN: 0954-0083). ISI, ISSN: 0954-0083, WOS:000323431500003 <https://journals.sagepub.com/doi/10.1177/0954008313477667>
2. **I. Biru**, C.M. Damian, S.A. Gârea, H. Iovu, *Benzoxazine-functionalized graphene oxide for synthesis of new nanocomposites*, **European Polymer Journal**, 83, 244-255, 2016, IF= 3, 3,862. ISI, ISSN: 0014-3057, WOS:000385595300021 <https://www.sciencedirect.com/science/article/pii/S0014305716304323>
3. **E. I. Bîru**, C. Andronescu, S. A. Gârea, H. Iovu, *Polybenzoxazine based nanocomposites reinforced with modified graphene oxide*, U.P.B. Scientific Bulletin Series B, 79, 4 (2017), ISSN 1454-2331. ISI, ISSN: 1454-2331, WOS:000424134600001 https://www.scientificbulletin.upb.ro/rev_docs_arhiva/full62a_231251.pdf
4. **E. I. Bîru**, S. A. Gârea, A. Nicolescu, E. Vasile, H. Iovu, *Advanced Polybenzoxazine Structures Based on Modified Reduced Graphene Oxide*, *Polymers*, 10, 4 (2018), 941, IF=3,426. ISI, ISSN: 2073-4360, WOS:000449988800010 <https://www.mdpi.com/2073-4360/10/9/941>
5. **E. I. Biru**, S.A. Gârea, H. Iovu, *Innovative hyperbranched polybenzoxazine-based graphene oxide – poly(amidoamines) nanomaterials*, *Polymers*, 12, (2020), 2424, IF=3,426. ISI, eISSN: 2073-4360, WOS:000585440700001 <https://www.mdpi.com/2073-4360/12/10/2424>
6. **E. I. Bîru**, S. A. Gârea, H. Iovu, *Developing Polybenzoxazine Composites Based on Various Carbon Structures*, *Macromolecular Chemistry and Physics*, 220, 3 (2019), 1800322, IF=2,335.

ISI, ISSN: 1022-1352, WOS:000457787700006
<https://onlinelibrary.wiley.com/doi/abs/10.1002/macp.201800322>

7. Ionut-Cristian Radu, **Iuliana-Elena Biru**, Celina-Maria Damian, Andreea-Cristina Ion, Horia Iovu, Eugenia Tanasa, Catalin Zaharia, Bianca Galateanu, *Grafting versus Crosslinking of Silk Fibroin-g-PNIPAM via Tyrosine-NIPAM Bridges*, *Molecules*, 2019, 24 (22), 4096, IF=3,267. ISI, eISSN: 1420-3049, WOS:000501529700085 <https://www.mdpi.com/1420-3049/24/22/4096>
8. Jana Ghitman, **Elena Iuliana Biru**, Raluca Stan, Horia Iovu, *Review of hybrid PLGA nanoparticles: Future of smart drug delivery and theranostics medicine*, *Materials & Design*, 2020, 108805, ISI, ISSN: 0264-1275, WOS:000567367500010 AIS= 2.566/Q, (IF=8.4/Q1); <https://doi.org/10.1016/j.matdes.2020.108805>
9. AM Onaş, **IE Biru**, SA Gârea, H Iovu, *Novel Bovine Serum Albumin Protein Backbone Reassembly Study: Strongly Twisted β -Sheet Structure Promotion upon Interaction with GO-PAMAM*, *Polymers* 12 (11), 2603, 2020, IF=3,426. ISI, eISSN: 2073-4360 WOS:000593872500001 <https://www.mdpi.com/2073-4360/12/11/2603>
10. J Ghitman, **EI Biru**, E Cojocaru, GG Pircalabioru, E Vasile, H Iovu, *Design of new bioinspired GO-COOH decorated alginate/gelatin hybrid scaffolds with nanofibrous architecture: structural, mechanical and biological investigations*, *RSC Advances* 11 (22), 13653-13665, 2021, IF=3,119. ISI, eISSN: 2046-2069, WOS:000640769800064 <https://pubs.rsc.org/en/content/articlelanding/2021/ra/d1ra01432c>
11. E Cojocaru, J Ghitman, **EI Biru**, GG Pircalabioru, E Vasile, H Iovu, *Synthesis and Characterization of Electrospun Composite Scaffolds Based on Chitosan-Carboxylated Graphene Oxide with Potential Biomedical Applications*, *Materials* 14 (10), 2535, 2021, IF=3,057. <https://www.mdpi.com/1996-1944/14/10/2535>
12. Elena Iuliana Biru, Madalina Ioana Necolau, Adriana Zainea, Horia Iovu, *Graphene Oxide-Protein-Based Scaffolds for Tissue Engineering: Recent Advances and Applications*, *Polymers*, 2023, 14, 5, 1032, <https://www.mdpi.com/2073-4360/14/5/1032>
13. Bianca Galateanu, Ariana Hudita, Elena Iuliana Biru, Horia Iovu, Catalin Zaharia, Eliza Simsensohn, Marieta Costache, Razvan-Cosmin Petca, Viorel Jinga, *Applications of polymers for organ-on-chip technology in urology*, *Polymers*, 2022, 14, 9, 1668, <https://www.mdpi.com/2073-4360/14/9/1668>
14. Mădălina I Necolau, Iuliana E Biru, Jana Ghițman, Cristina Stavarache, Horia Iovu, *Insightful characterization of sesamol-based polybenzoxazines: Effect of phenol and amine chain type on physical and nanomechanical properties*, *Polymer Testing*, 2022, 110, 107578, <https://www.sciencedirect.com/science/article/pii/S0142941822001039>
15. Lucian Toma Ciocan, Elena Iuliana Biru, Vlad Gabriel Vasilescu, Jana Ghitman, Ana-Roxana Stefan, Horia Iovu, Roxana Ilici, *Influence of Air-Barrier and Curing Light Distance on Conversion and Micro-Hardness of Dental Polymeric Materials*, *Polymers*, 2022, 14, 24, 5346, <https://www.mdpi.com/2073-4360/14/24/5346>
16. Madalina-Ioana NECOLAU, Daniel GRIGORE, Cristina STAVARACHE, Jana GHITMAN, Elena Iuliana BIRU, Horia IOVU, *Synthesis and thermo-mechanical characterization of vanillin-based polybenzoxazines with complex architecture*, *U.P.B. Sci. Bull., Series B*, 2023, 85, 1, 14, https://www.scientificbulletin.upb.ro/rev_docs_arhiva/fullcc8_548326.pdf

17. Nicolaie Marin, Cristina Orbeci, Liliana Bobirică, Ileana Rău, Calin Deleanu, Elena Iuliana Bîru, Paul Octavian Stănescu, Andrei Constantin Berbecaru, Ecaterina Matei, Constantin Bobirică, Alternative Solid Activators from Waste Glass for One-Part Alkali-Activated Fly Ash/Red Mud Cements, Materials, 2023, 16, 20, 6707, <https://www.mdpi.com/1996-1944/16/20/6707>
18. Madalina-Ioana Necolau, Daniel Grigore, Cristina Stavarache, Jana Ghitman, Elena Iuliana Bîru*, Horia Iovu, Synthesis and thermo-mechanical characterization of vanillin-based polybenzoxazines with complex architecture, U.P.B. Sci. Bull., Series B, 2023, 85, 1, 14, ISI, ISSN 1454-2331, 0 citări (fără autocitări) WOS:000957802300001
19. Irodia, R; Mîndroiu, M; Bîru, I; Ionita, G; Mihai, GV; Enachescu, M; Orbeci, C; Pîrvu, C, Double S-Scheme Polydopamine/TiO₂/Chlorophyll as Stable and Efficient Green Photoelectrocatalyst, CHEMELECTROCHEM, 10 (24), 2023, ISI, IF=4, ISSN 2196-0216, 2 citări (fără autocitări) WOS:001087779800001
20. Nicolaie Marin, Cristina Orbeci, Liliana Bobirică, Ileana Rău, Calin Deleanu, Elena Iuliana Bîru, Paul Octavian Stănescu, Andrei Constantin Berbecaru, Ecaterina Matei, Constantin Bobirică, Alternative Solid Activators from Waste Glass for One-Part Alkali-Activated Fly Ash/Red Mud Cements, Materials, 2023, 16, 20, 6707, IF=3.4, ISI, eISSN 1996-1944, 0 citări (fără autocitări) WOS 001095384600001
21. Bîru, EI; Sarbu, A ; Iovu, H, The Development of New Nanoplatfroms Based on Albumin and Graphene Oxide for Aticancer Therapy, Materiale Plastice, 60 (4), 1-9 (2023), ISI, IF=0.8, ISSN 0025-5289, 0 citări (fără autocitări) WOS:001143872900009

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

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E. Brevete obținute în întreaga activitate

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E – Brevete (pentru întreaga activitate)

Data:

Semnătura: Bîru Elena Iuliana