

LISTA DE LUCRĂRI

Conf. Dr. ing. ADRIANA LUNGU

1. A.I. Cernencu, A. I. Dinu, **A. Lungu**, I.C. Stancu, H. Iovu, *Nanoengineered biomimetic hydrogels: a major advancement to fabricate 3D-printed constructs for regenerative medicine* **Biotechnology & Bioengineering**, 1-22, **2022** (IF₂₀₂₀= 4.530; DOI: 10.1002/bit.28020)
2. **A. Lungu**, A.I. Cernencu, S. Dinescu, R. Balahura, P. Mereuta, M. Costache, K. Syverud, I.C. Stancu, H. Iovu, *Nanocellulose-enriched hydrocolloid-based hydrogels designed using a Ca²⁺ free strategy based on citric acid*, **Materials and Design**, 197, art. no. 109200, **2021** (FI₂₀₂₀=7.991; WOS: 000596289300012);
3. A.I. Cernencu, **A. Lungu**, D.M. Dragusin, I.C. Stancu, S. Dinescu, L.R. Balahura, P. Mereuta, M. Costache, H. Iovu, *3D Bioprinting of Biosynthetic Nanocellulose-Filled GelMA Inks Highly Reliable for Soft Tissue-Oriented Constructs*. **Materials**, 14, 4891, **2021** (FI₂₀₂₀=3.623; <https://doi.org/10.3390/ma14174891>);
4. **A. Lungu**, A.I. Cernencu, G.M. Vlasceanu, N.M. Florea, M. Ionita, H. Iovu, *3D POSS cages decorated 2D graphenic sheets: A versatile platform for silicon-carbonaceous nano-additives design*, **Composites Part B: Engineering**, 207, art. no. 108578, **2021** (IF₂₀₂₀=9.078; DOI: 10.1016/j.compositesb.2020.108578; WOS: 000606481400017);
5. E. Olăreț, D.-M. Drăgușin, A. Serafim, **A. Lungu**, A. Șelaru, A. Dobranici, S. Dinescu, M. Costache, I. Boerașu, B. Vasile, D. Steinmüller-Nethl, H. Iovu, I.-C. Stancu, *Electrospinning fabrication and cytocompatibility investigation of nanodiamond particles-gelatin fibrous tubular scaffolds for nerve regeneration*, **Polymers**, 13 (3), art. no. 407, 1-18, **2021** (IF₂₀₂₀=4.329; DOI: 10.3390/polym13030407; WOS: 000615428700001)
6. L.-R. Balahura, S. Dinescu, M. Balaș, A. Cernencu, **A. Lungu**, G.M. Vlăsceanu, H. Iovu, M. Costache, *Cellulose nanofiber-based hydrogels embedding 5-FU promote pyroptosis activation in breast cancer cells and support human adipose-derived stem cell proliferation, opening new perspectives for breast tissue engineering*, **Pharmaceutics**, 13 (8), art. no. 1189, **2021** (IF₂₀₂₀=6.321, DOI: 10.3390/pharmaceutics13081189);

7. A.I. Cernencu, **A. Lungu**, I.C. Stancu, A. Serafim, E. Heggset, K. Syverud, H. Iovu, *Bioinspired 3D printable pectin-nanocellulose ink formulations*, **Carbohydrate polymers**, 220, 12-21, **2019** (FI₂₀₂₀=9.381, DOI: 10.1016/j.carbpol.2019.05.026; WOS: 000470825500002)
8. **A. Lungu**, J. Ghitman, A.I. Cernencu, A. Serafim, N.M. Florea, E.Vasile, H. Iovu, *POSS-containing hybrid nanomaterials based on thiol-epoxy click reaction*, **Polymer**, 145, 324-333, **2018** (FI₂₀₂₀= 4.430; ISSN: 0032-3861; WOS:000433147700033);
9. N M. Florea, C M. Damian, C Ionescu, **A Lungu**, E Vasile, H Iovu, *Designing of Polyhedral Oligomeric Silsesquioxanes (POSS) based Dithiol/Dimethacrylate Nano-hybrids*, **Polymer Bulletin**, 75(9), 3897-3916, **2018** (FI₂₀₂₀=2.870; ISSN: 0170-0839; WOS:000441358200005);
10. A.I. Cernencu, **A. Lungu**, D. Dragusin, A. Serafim, E. Vasile, C. Ionescu, H. Iovu, *Design of cellulose–alginate films using PEG/NaOH aqueous solution as co-solvent*, **Cellulose**, 24 (10), 4419-4431, **2017** (FI₂₀₂₀=5.044; ISSN: 0969-0239; WOS:000410759600024);
11. A. Serafim, M.O. Constantinescu, F.T. Iordache, E. Vasile, **A. Lungu**, R. Marinescu, I.C. Stancu, *Bio-activation of inert pHEMA matrices with phosphate loaded cellulose fibers in order to induce mineralization*, **Materiale Plastice**, 54 (2), 235-238, **2017**; (FI₂₀₂₀=0.593; ISSN: 0025-5289; WOS:000408702100008);
12. S. Cecoltan, I.-C. Stancu, D.M. Drăgușin, A. Serafim, **A. Lungu**, C. Țucureanu, I. Caraș, V.C. Tofan, A. Sălăgeanu, E. Vasile, R. Mallet, D. Chappard, C. Coman, M. Istodorescu, H. Iovu; *Nanocomposite particles with improved microstructure for 3D culture systems and bone regeneration*; **Journal of Materials Science: Materials In Medicine**, 28 (10), art. No. 153; **2017** (FI₂₀₂₀=3.896; ISSN: 0957-4530;WOS:000411111500009);
13. **A. Lungu**, N. M. Florea, M. Manea, E. Vasile, H. Iovu, *Polyhedral oligomeric silsesquioxanes nanoreinforced methacrylate/epoxy hybrids*, **Journal of Applied Polymer Science**, 133 (4), art. no. 42912, **2016** (FI₂₀₂₀=3.125; ISSN: 0021-8995; WOS:000363678200012);
14. A.M. Pandele, M. Ionita, **A. Lungu**, E. Vasile, C. Zaharia, H. Iovu, *Porous chitosan/graphene oxide biocomposites for tissue engineering*, **Polymer Composites**, 38 (2), 363-370, **2017** (FI₂₀₂₀=3.171; ISSN: 0272-8397; WOS:000397292900016);
15. B. Balanuca, R. Stan, **A. Lungu**, E. Vasile, H. Iovu, *Hybrid networks based on epoxidized camelina oil*, **Designed Monomers And Polymers**, 20:1, 10-17; **2017** (FI₂₀₂₀=2.65; ISSN: 1385-772X; WOS:000391059500002);
16. D. Petre, S. Cecoltan, A. Serafim, **A. Lungu**, D.M. Dragusin, E.G. Stan, C. Tucureanu, E. Vasile, A. Salageanu, M. Istodorescu, H. Iovu, I.C. Stancu, *Composite particles gel-alg-apatite for*

- bone tissue regeneration* **Materiale Plastice** 53 (2), 269-272, **2016** (FI₂₀₂₀=0.593; ISSN: 0025-5289; WOS:000380629300018);
- 17.** N.M. Florea, **A. Lungu**, B. Balanuca, P. Badica, L. Craciun, C.M. Damian, M. Enculescu, C. Ionescu, G. Tihan, H. Iovu, *Effect of polyhedral oligomeric silsesquioxane nanoreinforcement on the properties of epoxy resin/monoglycidylether-terminated poly(dimethylsiloxane) nanocomposites*, **High Performance Polymers** 28 (6), 724-734, **2016** (FI₂₀₂₀=2.161; ISSN: 0954-0083, WOS:000382225900011);
- 18.** M.G. Albu, **A. Lungu**, E. Vasile, H. Iovu, *Collagen-sericin-nano-hydroxyapatite composites for bone tissue engineering*, **Farmacia**, 64 (3), 414-418, **2016** (FI₂₀₂₀=1.433; ISSN: 0014-8237, WOS:000378584400015);
- 19.** N.M. Florea, **A. Lungu**, P. Badica, L. Craciun, M. Enculescu, D.G. Ghita, C. Ionescu, R.G. Zgirian, H. Iovu, *Novel nanocomposites based on epoxy resin/epoxy-functionalized polydimethylsiloxane reinforced with POSS*, **Composites Part B: Engineering**, 75, pp. 226-234. **2015** (FI₂₀₂₀=9.078; ISSN: 1359-8368, WOS:000353426500022);
- 20.** A. Serafim, S. Cecoltan, **A. Lungu**, E. Vasile, H. Iovu, I.C. Stancu, *Electrospun fish gelatin fibrous scaffolds with improved bio-interactions due to carboxylated nanodiamond loading*, **RSC Advances** 5 (116), 95467-95477, **2015** (FI₂₀₂₀=3.361; ISSN: 2046-2069, WOS:000364907300009);
- 21.** B. Balanuca, R. Stan, A. Hanganu, **A. Lungu**, H. Iovu, *Design of new camelina oil-based hydrophilic monomers for novel polymeric materials*, **JAOCs, Journal of the American Oil Chemists' Society**, 92 (6), art. no. 2654, 881-891, **2015** (FI₂₀₂₀=1.849; ISSN: 0003-021X, WOS:000354826300011);
- 22.** S. Dinescu, B. Galateanu, E. Radu, A. Hermenean, **A. Lungu**, I.C. Stancu, D. Jianu, T. Tumber, M. Costache, *A 3D Porous Gelatin-Alginate-Based-IPN Acts as an Efficient Promoter of Chondrogenesis from Human Adipose-Derived Stem Cells*, **Stem Cells International** art. no. 252909; **2015** (FI₂₀₂₀=5.443; ISSN: 1687-966X, WOS:000355851800001);
- 23.** B. Balanuca, **A. Lungu**, I. Conicov, R. Stan, E. Vasile, D. M. Vuluga, H. Iovu, *Novel bio-based IPNs obtained by simultaneous thermal polymerization of flexible methacrylate network based on a vegetable oil and a rigid epoxy*, **Polymers for Advanced Technologies**, 26, 1, 19-25, **2015** (FI₂₀₂₀=3.665; ISSN: 1042-7147; WOS: 000346160900003);
- 24.** B. Balanuca, **A. Lungu**, A. M. Hanganu, L. R. Stan, E. Vasile, H. Iovu, *Hybrid nanocomposites based on POSS and networks of methacrylated camelina oil and various PEG derivatives*, **European Journal Lipid Science and Technology**, 116, 4, 458-469, **2014** (FI₂₀₂₀=2.679; ISSN: 1438-7697; WOS:000333756000012);

25. S. Dinescu, B. Galateanu, **A. Lungu**, E. Radu, S. Nae, H. Iovu, M. Costache, *Perilipin expression reveals adipogenic potential of hADSCs inside superporous polymeric cellular delivery systems*, **Biomed Research International**, Article number 830791, 9 pg., **2014** (FI₂₀₂₀=3.411; ISSN: 2314-6133; WOS:000336220200001);
26. S. Dinescu, B. Gălăteanu, M. Albu, **A. Lungu**, E. Radu, A. Hermenean, M. Costache, *Biocompatibility assessment of novel collagen-sericin scaffolds improved with hyaluronic acid and chondroitin sulfate for cartilage regeneration*, **BioMed Research International**, Article number 598056, 11 pg., **2013** (FI₂₀₂₀= 3.411; ISSN: 2314-6133; WOS:000327075400001);
27. **A. Lungu**, M. G. Albu, I. C. Stancu, N. M. Florea, E. Vasile, H. Iovu, *Superporous Collagen-Sericin Scaffolds*, **Journal of Applied Polymer Science**, 127, 3, 2269-2279, **2013** (FI₂₀₂₀=3.125; ISSN: 0021-8995; WOS:000310603100102);
28. N. M. Florea, **A. Lungu**, E. Vasile, H. Iovu, *The influence of nanosilica functionalization on the properties of hybrid nanocomposites*, **High Performance Polymers**, 25, 1, 61-69, **2013** (FI₂₀₂₀=2.161; ISSN: 0954-0083; WOS:000313696100007);
9. I. C. Stancu, **A. Lungu**, D. M. Dragusin, E. Vasile, C. Damian, H. Iovu, *Porous Gelatin-Alginate-Polyacrylamide Scaffolds with Interpenetrating Network Structure: Synthesis and Characterization*, **Soft Materials**, 11, 4, 384-393, **2013** (FI₂₀₂₀=2.429; ISSN: 1539-445X; WOS:000326713300002);
30. T. Zecheru, **A. Lungu**, P.-Z. Iordache, T. Rotariu, *Thermal and Spectroscopic Measurements of Some Energetic Compositions and Corresponding Aerosols Obtained*, **Combustion, Explosion, and Shock Waves**, 49, 2, 204-214, **2013** (FI₂₀₂₀=0.946; ISSN: 0010-5082; WOS:000317973300011);
31. C. Zaharia, M. R. Tudora, I. C. Stancu, B. Galateanu, **A. Lungu**, C. Cincu, *Characterization and deposition behaviour of silk hydrogels soaked in simulated body fluid*, **Materials Science & Engineering C**, 32 (4), 945-952, **2012** (FI₂₀₂₀=7.328; ISSN: 0928-4931; WOS:000303299300047);
32. **A. Lungu**, N. M. Florea, H. Iovu, *Dimethacrylic/epoxy interpenetrating polymer networks including octafunctional POSS*, **Polymer**, 53, 300-307, **2012** (FI₂₀₂₀=4.430; ISSN: 0032-3861; WOS:000299607400006);
33. A. Matei, M. Zamfirescu, M. Dinescu, E.C. Buruiana, T. Buruiana, **A. Lungu**, C. Mustaciosu, *Investigation of hybrid methacrylate based structures obtained by polymerization with femtosecond laser pulses*, **Digest Journal of Nanomaterials and Biostructures**, 7, 2, 823-832, **2012** (FI₂₀₂₀=0.963; ISSN: 1842-3582; WOS:000306063200047);

34. A. Lungu, N. M. Florea, C. M. Damian, H. Iovu, *Thermo-mechanical Properties of Interpenetrating Polymer Networks (IPNs) Filled with Fumed Silica Nanoparticles*, **Materiale Plastice**, 48, 3, 209-213, **2011** (FI₂₀₂₀=0.593; ISSN: 0025-5289; WOS:000296956300001);
35. A. Lungu, N. M. Sulca, E. Vasile, N. Badea, C. Parvu, H. Iovu, *The Influence of POSS Substituent on Synthesis and Properties of Hybrid Materials Based on Urethane Dimethacrylate (UDMA) and Various Polyhedral Oligomeric Silsesquioxane (POSS)*, **Journal of Applied Polymer Science**, 121, 2919-2926, **2011** (FI₂₀₂₀=3.125; ISSN: 0021-8995; WOS:000291598100053);
36. A. Lungu, I. Titorencu, M. G. Albu, N. M. Florea, E. Vasile, H. Iovu, V. Jinga, M. Simionescu, *The effect of BMP-4 loaded in 3D collagen-hyaluronic acid scaffolds on biocompatibility assessed with MG 63 osteoblast-like cells*, **Digest Journal of Nanomaterials and Biostructures**, 6, 4, 1897-1908, **2011** (FI₂₀₂₀=0.963; ISSN: 1842-3582; WOS:000300568100049);
37. A. Lungu, M. G. Albu, N. M. Florea, I. C. Stancu, E. Vasile, H. Iovu, *The influence of glycosaminoglycan type on the collagen-glycosaminoglycan porous scaffolds*, **Digest Journal of Nanomaterials and Biostructures**, 6, 4, 1867-1875, **2011** (FI₂₀₂₀=0.963; ISSN: 1842-3582; WOS:000300568100046);
38. P. O. Stanescu, N. M. Florea, A. Lungu, H. Iovu, *Kinetic Study on the Thermal Degradation of UDMA-BisGMA Copolymers*, **Materiale Plastice**, 48, 2, 148-153, **2011** (FI₂₀₂₀=0.593; ISSN: 0025-5289; WOS:000292630200007);
39. R. Stan, C. Ott, G. Voicu, A. Lungu, S. I. Roșca, *Cr- doped nanostructured silica obtained via structure directing agents and chiral 1-phenylethylamine-tricarbonyl-chromium*, **Revista Română de Materiale / Romanian Journal of Materials**, 41 (3), 234-239, **2011** (FI₂₀₂₀=0.563; ISSN: 1583-3186; WOS:000295564200007);
40. N. M. Șulcă, A. Lungu, C. Zaharia, R. Stan, H. Iovu, *Determination of the monomer reactivity ratios in co-polymerization of two distinct dimethacrylates for dental use*, **Materiale Plastice**, 47, 2, 254-258, **2010** (FI₂₀₂₀=0.593; ISSN: 0025-5289; WOS:000281051300027);
41. P. Flocea, L. Verestiuc, M. Popa, V. Sunel, A. Lungu, *Crosslinked networks based on polysaccharides and collagen for pilocarpine sustained release*, **Journal of Macromolecular Science, Part A: Pure and Applied Chemistry**, 47, 6, 616-625, **2010** (FI₂₀₂₀=2.168; ISSN: 1060-1325; WOS:000277588600017);
42. I.C. Stancu, A. Lungu, E. Rusen, A. Mocanu, P.Z. Iordache, D.M. Dragusin, C. Cotrut, E. Vasile, H. Iovu, *Multifunctional PAMAM-surface nanostructured particles organized in multimeric clusters. potential smart delivery vehicles of bioactive species through a high selective*

- amine-thiol bioconjugation strategy*, **Digest Journal of Nanomaterials and Biostructures**, 5, 4, 1077-1087, **2010** (FI₂₀₂₀=0.963; ISSN: 1842-3582; WOS:000286064000008);
- 43.** N. M. Șulcă, **A. Lungu**, S. A. Gârea, H. Iovu, *Monitoring the synthesis of new polymer nanocomposites based on different Polyhedral Oligomeric Silsesquioxanes using Raman Spectroscopy*, **Journal of Raman Spectroscopy**, 40, 11, 1634-1640, **2009** (FI₂₀₂₀=3.133, ISSN: 0377-0486; WOS:000272521700024);
- 44.** E. Barbu, L. Verestiuc, M. Iancu, A. Jataru, **A. Lungu**, J. Tsibouklis, *Hybrid polymeric hydrogels for ocular drug delivery: nanoparticulate systems from copolymers of acrylic acid-functionalised chitosan and N-isopropylacrylamide or 2-hydroxyethyl methacrylate*, **Nanotechnology**, 20, 22, Article number 225108, **2009** (FI₂₀₂₀=3.874; ISSN: 0957-4484; WOS:000266045200008);
- 45.** **A. Lungu**, E. Rusen, I.C. Stancu, *Epoxy-mediated immobilization of PAMAM dendrimers on methacrylic hydrogels*, **Digest Journal of Nanomaterials and Biostructures**, 4, 1, 97-107, **2009** (FI₂₀₂₀=0.963; ISSN: 1842-3582; WOS:000267327200013);
- 46.** N. M. Șulcă, **A. Lungu**, G. Voicu, S. A. Gârea, H. Iovu, *Advanced characterization of polyhedral oligomeric silsesquioxanes used for nanocomposites synthesis*, **Materiale Plastice**, 46, 2, 124-128, **2009** (FI₂₀₂₀=0.593; ISSN: 0025-5289; WOS:000269110000002);
- 47.** R. Stan, C. Ott, N. M. Șulcă, **A. Lungu**, H. Iovu, *Functionalized D-sorbitol based organogelators for dental materials*, **Materiale Plastice**, 46, 3, 230-235, **2009** (FI₂₀₂₀=0.593; ISSN: 0025-5289; WOS:000272488600004);
- 48.** A. V. Munteanu, C. Fetecău, F. Stan, **A. Lungu**, H. Iovu, *Evaluation of cutting force for two different graphite-Teflon composites*, **Materiale Plastice**, 46, 2, 153-157, **2009** (FI₂₀₂₀=0.593; ISSN: 0025-5289; WOS:000269110000008);
- 49.** N. M. Șulcă, **A. Lungu**, R. Popescu, S. A. Gârea, H. Iovu, *New polymeric nanocomposites based on Polyhedral Oligomeric Silsesquioxanes*, **Materiale Plastice**, 46, 1, 1-10, **2009** (FI₂₀₂₀=0.593; ISSN: 0025-5289; WOS:000265431100001);
- 50.** **A. Lungu**, T. Zecheru, S. Comșa, H. Iovu, *Influence of different initiators against the mechanical properties of poly(ϵ -caprolactone) used for biodegradable bone implants*, **Revista de Chimie**, 59, 11, 1190-1193, **2008** (FI₂₀₂₀=1.755; ISSN: 0034-7752; WOS:000261748400005);
- 51.** I. Titorencu, V. Jinga, **A. Lungu**, V. Trandafir, M.G. Albu, I. Rău, H. Iovu, *New scaffold structure based on collagen. Fabrication and biocompatibility evaluation*, **Molecular Crystals and Liquid Crystals**, 486, 1, 1189-1198, **2008** (FI₂₀₂₀=0.896; ISSN: 1542-1406; WOS:000256186000015);

52. A. Lungu, M. Albu, V. Trandafir, *New biocomposite matrices structures based on collagen and synthetic polymers designed for medical applications*, **Materiale Plastice**, 44, 4, 273-277, **2007** (FI₂₀₂₀=0.593; ISSN: 0025-5289; WOS:000253078000003);

53. A. Lungu, I.C. Stancu, E. Rusen, B. Mărculescu, H. Iovu, *Studies concerning the chemical immobilization of dendrimers on macroporous polymer matrix*, **Journal of Optoelectronics and Advanced Materials**, 9, 11, 3454 - 3458, **2007** (FI₂₀₂₀=0.587; ISSN: 1454-4164; WOS:000251435200035);

[Reviste de specialitate de circulație națională recunoscute de CNCSIS.](#)

1. V. Pruna, I. Titorencu, M.G. Albu, **A. Lungu**, V. Jinga, R. Radulescu, M. Simionescu, *The osteoinductive potential of collagen based scaffolds for human mesenchymal stromal cells depends on scaffold composition and on the source of the cells; the need for personalized tests*. **Annals of the Romanian Society for Cell Biology**, 20(2), p.20, **2016**, ISSN (print): 2067-3019, e-ISSN (online issues): 2067-8282, revista recunoscuta CNCSIS categoria B⁺;

2. N.M. Florea, **A. Lungu**, L. Craciun, C. Ionescu, R.G. Zgârian, G. Tihan, H. Iovu, *The effect of epoxy functionalized polydimethylsiloxane on epoxy resins thermomechanical and morphological properties*, **UPB Scientific Bulletin, Series B: Chemistry and Materials Science**, 77 (4), 29-40, **2015**, ISSN: 1454-2331, revista recunoscuta CNCSIS categoria B⁺;

3. A. Lungu, N. M. Florea, G. Voicu, H. Iovu, *Comparison between octa- or monofunctional POSS interactions with dimethacrylate monomers*, **UPB Scientific Bulletin, Series B: Chemistry and Materials Science**, 73, 3, 177-188, **2011**, ISSN: 1454-2331, revista recunoscuta CNCSIS categoria B⁺;

4. M. G. Albu, A. Ficai, **A. Lungu**, *Preparation and characterization of collagen matrices obtained at different freezing temperatures*, **Revista de Pielărie Incălzătoare**, 10, 3, 39-50, **2010**, ISSN: 1583-4433, revista recunoscuta CNCSIS categoria B⁺;

5. N. M. Șulca, A. V. Munteanu, R. G. Popescu, **A. Lungu**, R. Stan, H. Iovu, *Dibenzylidene sorbitol derivatives for improving dental materials properties*, **UPB Scientific Bulletin, Series B: Chemistry and Materials Science**, 72, 4, 25-36, **2010**, ISSN: 1454-2331, revista recunoscuta CNCSIS categoria B⁺;

6. A. Lungu, C. Ghițulică, S. Gârea, G. Voicu, H. Iovu, C. Neagu, *Structural analysis on photopolymerized commercial dental composites*, **UPB Scientific Bulletin, Series B: Chemistry and Materials Science**, 70, 1, 3-14, **2008**, ISSN: 1454-2331, revista recunoscuta CNCSIS categoria B⁺;

7. S. Comşa, A. Pacioga, **A. Lungu**, *Determination of Mechanical Properties Of Poly (ϵ -Caprolactone) Used For Biodegradable Bone Implants*, **The Romanian Review of Precision Mechanics, Optics and Mechatronics**, 34, 18, 69-74, **2008**, ISSN: 1584-5982 revista recunoscuta CNCSIS categoria B⁺;