

Papers list

A. Articles:

1. **Gherasim O.**; Grumezescu A.M.; Grumezescu V.; Negut I.; Dumitrescu M.F.; Stan M.S.; Nica I.C.; Holban A.M.; Socol G.; Andronescu E. *Bioactive coatings based on hydroxyapatite, kanamycin, and growth factor for biofilm modulation*. *Antibiotics* 2021, 10, 160 (IF₂₀₂₀ = 4,639)
2. **Gherasim O.**; Grumezescu A.M.; Fikai A.; Grumezescu V.; Holban A.M.; Gălățeanu B.; Hudită A. *Composite P(3HB-3HV)-CS spheres for enhanced antibiotic efficiency*. *Polymers* 2021, 13, 989 (IF₂₀₂₀ = 4,329)
3. **Gherasim O.**; Popescu-Pelin G.; Florian P.; Icriverzi M.; Roseanu A.; Mitran V.; Cimpean A.; Socol G. *Bioactive ibuprofen-loaded PLGA coatings for multifunctional surface modification of medical devices*. *Polymers* 2021, 13, 1413 (IF₂₀₂₀ = 4,329)
4. **Gherasim O.**; Popescu R.C.; Grumezescu V.; Mogoșanu G.D.; Mogoantă L.; Iordache F.; Holban A.M.; Vasile B.Ș.; Bîrcă A.C.; Oprea O.-C.; Grumezescu A.M.; Andronescu E. *MAPLE coatings embedded with essential oil-conjugated magnetite for anti-biofilm applications*. *Materials* 2021, 14, 1612 (IF₂₀₂₀ = 3,623)
5. **Gherasim O.**; Grumezescu A.M.; Mogoșanu G.D.; Vasile B.Ș.; Bejenaru C.; Bejenaru L.E.; Andronescu E.; Mogoantă L. *Biodistribution of essential oil-conjugated silver nanoparticles*. *Romanian Journal of Morphology and Embriology* 2020, 61(4), 1099-1109 (IF₂₀₁₉ = 1,411)
6. **Gherasim O.**; Grumezescu A.M.; Grumezescu V.; Iordache F.; Vasile B.S.; Holban A.M. *Bioactive surfaces of polylactide and silver nanoparticles for the prevention of microbial contamination*. *Materials* 2020, 13(3), 768 (IF₂₀₁₉ = 3,057)
7. Popescu R.C.; Savu D.I.; Olarescu A.D.; **Gherasim O.**; Banita Ș.; Straticiuc M.; Mirea D.; Andrei R.F.; Trusca R.; Vasile B.Ș.; Socol G.; Andronescu E. *In vitro magnetic targeted delivery of doxorubicin using iron oxide nanoparticles leads to enhanced cell death in glioblastoma*. *U.P.B. Scientific Bulletin Series B: Chemistry and Materials Science* 2020, 82(4), 73-84
8. Visan A.I.; Popescu-Pelin G.; **Gherasim O.**; Mihailescu A.; Socol M.; Zgura I.; Chiritoiu M.; Sima L.E.; Antohe F.; Ivan L.; Vranceanu D.M.; Cotrut C.M.; Cristescu R.; Socol G. *Long-term evaluation of dip-coated PCL-blend-PEG coatings in simulated conditions*. *Polymers* 2020, 12, 717 (IF₂₀₁₉ = 3,426)
9. **Gherasim O.**; Puiu R.A.; Bîrcă A.C.; Burdușel A.-C.; Grumezescu A.M. *An updated review on silver nanoparticles in biomedicine*. *Nanomaterials* 2020, 10, 2318 (IF₂₀₁₉ = 4,324)
10. Grumezescu V.; **Gherasim O.**; Negut I.; Banita S.; Holban A.M.; Florian P.; Icriverzi M.; Socol G. *Nanomagnetite-embedded PLGA spheres for multipurpose medical applications*. *Materials* 2019, 12, 2521 (IF₂₀₁₈ = 2,972)
11. Grumezescu V.; Negut I.; **Gherasim O.**; Birca A.C.; Grumezescu A.M.; Hudita A.; Galateanu B.; Costache M.; Andronescu E.; Holban A.M. *Antimicrobial applications of MAPLE processed coatings based on PLGA and lincomycin functionalized magnetite nanoparticles*. *Applied Surface Science* 2019, 484, 587-599 (IF₂₀₁₈ = 5,155)

12. Visan A.I.; Popescu-Pelin G.; **Gherasim O.**; Grumezescu V.; Socol M.; Zgura I.; Florica C.; Popescu R.C.; Savu D.; Holban A.M.; Cristescu R.; Matei C.E.; Socol G. *Laser processed antimicrobial nanocomposite based on polyaniline grafted lignin loaded with gentamicin-functionalized magnetite*. *Polymers* 2019, 11, 283 (IF₂₀₁₈ = 3,164)
13. Teleanu R.I.; **Gherasim O.**; Gherasim T.G.; Grumezescu V.; Grumezescu A.M.; Teleanu D.M. *Nanomaterial-based approaches for neural regeneration*. *Pharmaceutics* 2019, 11(6), 266 (IF₂₀₁₈ = 4,773)
14. Fikai D.; Grumezescu V.; **Fufa O.M.**; Popescu R.C.; Holban A.M.; Fikai A.; Grumezescu A.M.; Mogoanta L.; Mogosanu G.D.; Andronescu E. *Antibiofilm coatings based on PLGA and nanostructured cefepime-functionalized magnetite*. *Nanomaterials* 2018, 8, 633 (IF₂₀₁₇ = 3,504)
15. Popescu-Pelin G.; **Fufă O.**; Popescu R.C.; Savu D.; Socol M.; Zgură I.; Holban A.M.; Vasile B.Ş.; Grumezescu V.; Socol G. *Lincomycin-embedded PANI-based coatings for biomedical applications*. *Applied Surface Science* 2018, 455, 653-666 (IF₂₀₁₇ = 4,439)
16. Burduşel A.-C.; **Gherasim O.**; Grumezescu A.M.; Mogoanta L.; Fikai A.; Andronescu E. *Biomedical applications of silver nanoparticles: An up-to-date overview*. *Nanomaterials* 2018, 681 (IF₂₀₁₇ = 3,504)
17. **Fufă O.**; Socol M.; Preda N.; Grigorescu S.; Croitoru S.; Socol G. *MAPLE deposition of PLGA microspheres for medical applications*. *Digest Journal of Nanomaterials and Biostructures* 2017, 12(1), 73-80 (IF₂₀₁₆ = 0,836)
18. Raşoga O.; Sima L.E.; Chiriţoiu M.; Popescu-Pelin G.; **Fufă O.**; Grumezescu V.; Socol M.; Stănculescu A.; Zgură I.; Socol G. *Biocomposite coatings based on poly(3-hydroxybutyrate-co-3-hydroxyvalerate)/calcium phosphates obtained by MAPLE for bone tissue engineering*. *Applied Surface Science* 2017, 417, 204-212 (IF₂₀₁₆ = 3,387)

B. Book chapters:

1. **Gherasim O.** & Grumezescu A.M. *Silver nanoparticles in medicine*. Capitol 3 în: Torchilin V. (Ed.), *Handbook of Materials for Nanomedicine: Metal-based and Other Nanomaterials* 2020, Jenny Stanford Publishing (Singapore), 111-146 (ISBN 9789814800938)
2. **Gherasim O.**; Grumezescu V.; Socol G.; Fikai A. *Nanoarchitectonics prepared by laser processing and their biomedical applications*. Capitol 2 în: Grumezescu A.M. (Ed.), *Nanoarchitectonics in Biomedicine* 2019, Elsevier (Oxford, UK), 23-53 (ISBN 9780128162002)
3. **Gherasim O.**; Popescu R.C.; Gherasim T.G.; Grumezescu V.; Andronescu E. *Pharmacotherapy and nanotechnology*. Capitol 1 în: Grumezescu A.M. (Ed.), *Nanoparticles in Pharmacotherapy* 2019, Elsevier (Oxford, UK), 1-21 (ISBN 9780128165041)
4. Bîrca A.; **Gherasim O.**; Grumezescu V.; Grumezescu A.M. *Introduction in thermoplastic and thermosetting polymers*. Capitol 1 în: Grumezescu V. & Grumezescu A.M. (Eds.), *Materials for Biomedical Engineering: Thermoset and Thermoplastic Polymers* 2019, Elsevier (Oxford, UK), 1-28 (ISBN 9780128168745)

5. Burdusel A.C.; **Gherasim O.**; Grumezescu V.; Grumezescu A.M. *Degradation versus resorption*. Capitol 1 în: Grumezescu V. & Grumezescu A.M. (Eds.), *Materials for Biomedical Engineering: Absorbable Polymers 2019*, Elsevier (Oxford, UK), 1-18 (ISBN 9780128184158)
6. **Fufă O.**; Vlăsceanu G.M.; Dolete G.; Cabuzu D.; Puiu R.A.; Cîrjă A.; Bogdan N.; Grumezescu A.M. *Nanostructured composites based on biodegradable polymers and silver nanoparticles*. Capitol 19 în: Thakur V.K.; Thakur M.K.; Kessler M.R. (Eds.), *Handbook of Composites from Renewable Materials: Nanocomposites – Science and Fundamentals 2017*, Wiley (Massachusetts, SUA), 585-621 (ISBN 9781119224365)
7. **Fufă O.**; Popescu R.C.; Gherasim T.G.; Grumezescu A.M.; Andronescu E. *Silver-based nanostructures for cancer therapy*. Capitol 16 în: Fikai A. & Grumezescu A.M. (Eds.), *Nanostructures in Therapeutic Medicine Series: Nanostructures for Cancer Therapy 2017*, Elsevier (Oxford, UK), 405-428 (ISBN 9780323461443)
8. Popescu R.C.; **Fufa O.**; Apostol A.I.; Popescu D.; Grumezescu A.M.; Andronescu E. *Antimicrobial thin coatings prepared by laser processing*. Capitol 9 în: Fikai A. & Grumezescu A.M. (Eds.), *Nanostructures in Therapeutic Medicine Series: Nanostructures for Antimicrobial Therapy 2017*, Elsevier (Oxford, UK), 223-236 (ISBN 9780323461528)
9. **Fufă M.O.M.**; Popescu R.C.; Grumezescu A.M.; Holban A.M. *Microorganisms: New trends in environment-friendly and energy-saving water purification*. Capitol 7 în: Grumezescu A.M. (Ed.), *Nanotechnology in the Agri-Food Industry: Water Purification 2017*, Elsevier (Oxford, UK), 263-288 (ISBN 9780128043004)
10. Popescu R.C.; **Fufă M.O.M.**; Grumezescu A.M.; Holban A.M. *Nanostructured membranes for the microbiological purification of drinking water*. Capitol 12 în: Grumezescu A.M. (Ed.), *Nanotechnology in the Agri-Food Industry: Water Purification 2017*, Elsevier (Oxford, UK), 421-446 (ISBN 9780128043004)

Scientific events attended

1. Florian P.; Icriverzi M.; Grumezescu V.; **Gherasim O.**; Socol G.; Roseanu A. *Ibuprofen and hyaluronic acid – loaded chitosan:PEG coatings for wound healing promotion*. International Symposium on Priorities of Chemistry for a Sustainable Development (PRIOCHEM), octombrie 2021 (ePoster)
2. Duta L.; Chifiriuc M.C.; Grumezescu V.; Stan G.E.; **Gherasim O.**; Popescu-Pelin G.; Craciun V.; Oktar F.N. *Cytocompatible biological-derived hydroxyapatite coatings presenting antimicrobial activity*. European Materials Research Society (E-MRS) Fall Meeting, septembrie 2021 (prezentare orală)
3. **Gherasim O.**; Grumezescu A.M.; Grumezescu V.; Negut I.; Stan M.S.; Holban A.M.; Andronescu E. *Bioactive coatings based on hydroxyapatite for biofilm modulation*. E-MRS Spring Meeting, iunie 2021 (ePoster)

4. Grumezescu V.; **Gherasim O.**; Negut I.; Dorcioman G.; Grumezescu A.M.; Basil H.; Holban A.M. *Fe₃O₄ nanoarchitectures functionalized with eugenol for modulation of virulence and biofilm formation*. E-MRS Spring Meeting, iunie 2021 (ePoster)
5. Duta L.; Grumezescu V.; Stan G.E.; **Gherasim O.**; Popescu-Pelin G.; Oktar F.N. *Influence of thermal treatments on the morpho-structural and mechanical characteristics of biological-derived HA coatings*. E-MRS Spring Meeting, iunie 2021 (ePoster)
6. Duta L.; Grumezescu V.; Chifiriuc M.C.; Stan G.E.; **Gherasim O.**; Chioibas D.; Popescu A.C.; Oktar F.N. *Pulsed laser deposition of cytocompatible biological-derived hydroxyapatite coatings with antimicrobial activity*. E-MRS Spring Meeting, iunie 2021 (ePoster)
7. Visan A.I.; Popescu-Pelin G.; **Gherasim O.**; Mihailescu A.; Socol M.; Zgura I.; Chiritoiu M.; Sima L.; Antohe F.; Radulescu L.; Vranceanu D.; Cotrut C.; Cristescu R.; Socol G. *Surface functionalization with anticorrosive and antimicrobial biodegradable polymeric implants*. Corrosion and Materials Degradation Web Conference, mai 2021 (prezentare orală)
8. Popescu R.C.; Olarescu A.D.; **Gherasim O.**; Banita S.; Straticiuc M.; Mirea D.A.; Andrei R.F.; Vasile B.S.; Socol G.; Andronescu E.; Savu D.I. *In vitro magnetic targeted delivery of doxorubicin using iron oxide nanoparticles leads to enhanced cell death*. International Conference on Radiation in Various Fields of Research (RAD), iulie 2020 (ePoster)
9. Visan A.I.; Popescu-Pelin G.; **Gherasim O.**; Mihailescu A.; Socol M.; Zgura I.; Chiritoiu M.; Sima L.E.; Antohe F.; Ivan L.; Vranceanu D.M.; Cotruț C.M.; Cristescu R.; Socol G. *Dip-coated PCL-blend-PEG coatings degradation comportment in simulated conditions*. National Online Conference of Biophysics (CNB), iunie 2020 (prezentare orală)
10. Icriverzi M.; Florian P.; Moisei M.; **Gherasim O.**; Popescu-Pelin G.; Trif M.; Socol G.; Roșeanu A. *Composite coatings based on PLGA for topical treatment*. PRIOCHEM, noiembrie 2019, București, România (poster)
11. Icriverzi M.; Florian P.; Moisei M.; **Gherasim O.**; Popescu-Pelin G.; Trif M.; Socol G.; Roșeanu A. *New composite coatings for topical treatment*. The Annual International Conference of the Romanian Society of Biochemistry and Molecular Biology (RSBMB), septembrie 2019, Iași, Romania (poster)
12. Vișan A.; Popescu-Pelin G.; **Gherasim O.**; Grumezescu V.; Socol M.; Zgura I.; Florica C.; Popescu R.C.; Savu D.; Holban A.M.; Cristescu R.; Matei C.E.; Socol G. *Electric field-sensitive polymers as controlled Gentamicin sulfate delivery platforms*. E-MRS Spring Meeting, mai 2019, Nisa, Franța (prezentare orală)
13. Popescu-Pelin G.; **Fufă O.**; Popescu R.C.; Savu D.; Socol M.; Zgură I.; Holban A.M.; Vasile B.Ș.; Grumezescu V.; Socol G. *Synthesis and characterization of Lincomycin-embedded PANI-based coatings*. RSBMB, septembrie 2018, București, România (poster)
14. **Fufă O.** *Acoperiri biocompatibile procesate laser*. Metode și componente electronice. Aplicații și transfer tehnologic. Centrul de Cercetări Avansate pentru Materiale, Produse și Procese Inovative (CAMPUS-UPB), mai 2018, București, România (prezentare orală)

15. **Fufă O.**; Popescu-Pelin G.; Socol M.; Mogoantă L.; Popescu R.C.; Holban A.M.; Socol G.; Crăciun V.; Grumezescu A.M.; Andronescu E. *HAp/AgNPs coatings for titanium-based implants*. International Conference on Advanced Materials (ROCAM), iulie 2017, București, România (prezentare orală)
16. **Fufă O.**; Popescu-Pelin G.; Trușcă R.; Vasile B.Ș.; Socol M.; Zgură I.; Popescu R.C.; Holban A.M.; Grumezescu A.M.; Andronescu E.; Socol G.; Crăciun V. *Bionanostructured CaPs/AgNPs coatings for titanium-based materials*. ROCAM, iulie 2017, București, România (poster)
17. **Fufă O.**; Stăncălie A.; Miroiu M.; Mihăiescu D.E.; Crăciun V.; Axente E. *Compositional and morphological characterizations of metal implants used in dentistry by spectroscopic techniques*. ROCAM, iulie 2017, București, România (poster)
18. **Fufă O.**; Vasile B.Ș.; Trușcă R.; Socol M.; Mogoantă L.; Popescu R.C.; Popescu-Pelin G.; Socol G.; Grumezescu A.M.; Andronescu E. *HAp-Ag bionanostructured coatings for titanium implants*. Conference of the Romanian Electron Microscopy Society (CREMS), mai 2017, Sinaia, România (poster)
19. **Fufă O.**; Socol G.; Grumezescu A.M.; Andronescu E.; Trușcă R.; Vasile B.Ș.; Socol M.; Popescu R.C.; Holban A.M. *Biocompatible protective HAp-Ag coatings for titanium implants*. Symposium of the Romanian Chemical Engineering Society (SICHEM), septembrie 2016, București, România (prezentare orală)
20. **Fufă O.**; Socol G.; Grumezescu A.M.; Andronescu E.; Socol M.; Popescu R.C.; Holban A.M. *Biocompatible HAp-Ag nanostructured coatings for titanium implants*. ICPEPA, septembrie 2016, Brașov, România (poster)