

**Lista lucrărilor publicate de către studenții doctoranzi în ultimii 5 ani
(2021-2025)**

1. Lacan, I.; Moldovan, M.; Sarosi, C.; Ardelean, I. Chitosan Effect on Hardening Dynamics of Calcium Phosphate Cement: Low-Field NMR Relaxometry Investigations. *Polymers* 2022, 14, 3042. <https://www.mdpi.com/2073-4360/14/15/3042> (IF=4.9)
2. Lacan, I.; Moldovan, M.; Ardelean, I. The Influence of Chitosan on Water Absorption and Solubility of Calcium Phosphate Cement. *Coatings* 2023, 13, 1641. <https://doi.org/10.3390/coatings13091641> (IF=2.8)
3. Lacan, I.; Moldovan, M.; Sarosi, C.; Cuc, S.; Pastrav, M.; Petean, I.; Ene, R. Mechanical Properties and Liquid Absorption of Calcium Phosphate Composite Cements. *Materials* 2023, 16, 5653. <https://www.mdpi.com/1996-1944/16/16/5653> (IF=3.1)
4. Simedru, A.F.; Becze, A.; Cadar, O.; Scurtu, D.A.; Simedru, D.; Ardelean, I. Structural Characterization of Several Cement-Based Materials Containing Chemical Additives with Potential Application in Additive Manufacturing. *Int. J. Mol. Sci.* 2023, 24, 7688
5. Simedru, A.F.; Cadar, O.; Becze, A.; Simedru, D. Restructuring the Basic Design of Several Accelerator-Based Concrete Mixes by Integrating Superplasticizers. *Materials* 2024, 17, 5582.
6. Tăut, M.A., Moldovan, M., Filip, M., Petrean, I., Sarosi, C., Cuc, S., Taut, A.C., Ardelean, I., Lazăr, V., Man, S.C. Synthesis and Characterization of Microcapsules as Fillers for Self-Healing Dental Composites, *Nanomaterials* 14(22),1853 (2024) <https://doi.org/10.3390/nano14221853>
7. Cotojman, L, Marinca, TF, Popa, F, Neamtu, BV, Prica, VC, Chicinaș, I *Producing Soft Magnetic Composites by Spark Plasma Sintering of Pseudo Core-Shell Ni-Fe Alloy@Mn0.5Zn0.5Fe2O4 Powders*, *MATERIALS*, 16 (2023) DOI10.3390/ma16020501 Q2 ranked (zona galbenă)
8. T.F. Marinca, L. Cotojman, B.V.Neamtu, F. Popa, C.V. Prica, H. Hirian, N.A. Sechel, I. Ciascai, I. Chicinaș, *Soft magnetic composite of Ni3Fe/ZnFe2O4 type obtained by mechanical alloying/milling and spark plasma sintering*, *CERAMICS INTERNATIONAL*, 50 (2024) 7547-7557 DOI10.1016/j.ceramint.2023.12.061 Q1 ranked (zona roșie)
9. Marinca, TF, Cotojman, L, Popa, F, Neamtu, BV, Prica, CV, Chicinaș, I *Pseudo-Core-Shell Permalloy Superalloy@ZnFe2O4 Powders and Spark Plasma Sintered Compacts Based on Mechanically Alloyed Powders*, *MATERIALS*, 17 (2024), DOI10.3390/ma17164139 Q2 ranked (zona galbenă)
10. Ana Cotai, BogdanViorel Neamtu, Florin Popa, TraianFlorin Marinca, Olivier Isnard, Ionel Chicinaș, *Synthesis and characterisation of amorphous Fe38.5Co38.5Nb7B15Cu1 powders via mechanosynthesis using industrial raw materials*, *Journal of Alloys and Compounds*, Volume 880, 5 November 2021, 160497, <https://doi.org/10.1016/j.jallcom.2021.160497> , FI = 6.371 , Q1
11. Ana Cotai, Salvatore Miraglia, Bogdan Viorel Neamtu, Traian Florin Marinca, Horea Florin Chicinas, Olivier Isnard, Ionel Chicinas, *A comparative study of nanocrystalline Fe38.5Co38.5Nb7P15Cu1 alloys obtained by mech*

- anical alloying and rapid quenching*, Archives of Metallurgy and Materials, Volume 67, No 2, date 2022/06/10, <https://doi.org/10.24425/amm.2022.137790> , FI = 0.633, Q4
12. Cebotari, V, Popa, F, Marinca, TF, Neamtu, BV, Sechel, NA, Galatanu, M, Galatanu, A, Chicinaş, I *Obtaining and characterisation of thermoelectric Mg₂Si compound via wet and dry mechanical alloying and spark plasma sintering*, JOURNAL OF MATERIALS RESEARCH AND TECHNOLOGY-JMR&T, 26 (2023) 8904-8914 DOI10.1016/j.jmrt.2023.09.167 Q1 ranked (zona roşie)
 13. Popa, F, Cebotari, V, Marinca, TF, Isnard, O, Chicinaş, I
Crystallographic and magnetic analysis of ordered-disordered Ni₅₁Mn₃₄Sn₁₅ Heusler alloy obtained by mechanical alloying and annealing, JOURNAL OF ALLOYS AND COMPOUNDS, 964 (2023), DOI10.1016/j.jallcom.2023.171275 Q1 ranked (zona roşie)
 14. Andrada Daniel, Mircea Nasui, Traian Petrisor Jr, Ramona Bianca Sonher, Andrea Augieri, Cornelia Pop, Anna Palau, Angelo Vannozzi, Giuseppe Celentano, Lelia Ciontea, Traian Petrisor *Superconductor Science and Technology* 35 (5), 054010 (2022);- zona galbena
 15. Mircea Nasui, Ramona Bianca Sonher, Ecaterina Ware, Andrada Daniel, Traian Petrisor Jr, Mihai Sebastian Gabor, Lelia Ciontea, Traian Petrisor *Coatings* 11 (11), 1376 (2021)-Zona galbena
 16. W.A. Uriciuc, M. Suciuc, L.B. Tudoran, A.I. Botean, H.F. Chicinas, M.A. Anghel, C.O. Popa, A. Ilea, *Surface Treatments on Cobalt–Chromium Alloys for Layering Ceramic Paint Coatings in Dental Prosthetics*, *Coatings* 2025, 15(7), 833 (zona galbena)
 17. N. L. Paul, R. Carpa, R.E. Ionescu, C.O.Popa, *The Biomedical Limitations of Magnetic Nanoparticles and a Biocompatible Alternative in the Form of Magnetotactic Bacteria*, *J. Funct. Biomater.* 2025, 16(7), 231; (zona roşie)
 18. A.I. Ene, V. Tosa, L.M. Gherman, L.M. Hantig, M.M. Onofrei, L.P. Mocan, C.M. Mihiu, C.O.Popa, G. Dindelegan, *In Vivo Biocompatibility Assessment of a Novel Cyanoacrylate–Polylactic Acid Hemostatic Patch*, *Materials* 2025, 18(15), 3581 (zona roşie)
 19. N.L. Paul, C.O. Popa, E.R. Ionescu, *Updates on the Advantages and Disadvantages of Microscopic and Spectroscopic Characterization of Magnetotactic Bacteria for Biosensor Applications*, *Biosensors* 2025, 15(8), 472 (zona roşie)
 20. N.L. Paul, C.O. Popa, E.R. Ionescu, *Natural Iron Oxide Nanoparticles Produced by Aquatic Magnetotactic Bacteria as Ideal Nanozymes for Nano-Guided Biosensing Platforms—A Systematic Review*, *Biosensors* 2025, 15(9), 590 (zona roşie)
 21. A. Ilie-Ene, V.P. Tosa, L.M. Gherman, R.M. Pop, L.M. Hantig, C.O. Popa, G.C. Dindelegan, *New Biocompatible Cyanoacrylate and Polylactic Acid Hemostatic Patch: An In Vivo Proof of Concept Study*, *Materials* 2025, 18(6), 1271; (zona roşie)
 22. W.A. Uriciuc, B.A. Bosca, M. Tertis, A.B. Țigu, R.C. Moldovan, M. Suciuc, L. Barbu-Tudoran, T.L. Topală, L. Crisan, C.O. Popa, A. Ilea, *Tobacco Residues Deposition at the Surface of Cobalt–Chromium Dental Alloys and the Effect of Cigarette Smoke Extract on Human Mesenchymal Stem Cells: An In Vitro Study*, *Coatings* 2025, 15(3), 279; (i.f. 3.1) (zona galbena)
 23. V. Tosa, A. Ilie-Ene, S.C. Tripon, A. Mesaros, R. Fechete, N. Tosa, A. Csapai, G. Dindelegan, C. Popa, *Electrospun Polymeric Fiber Systems Inoculated with*

- Cyanoacrylate Tissue Adhesive: A Novel Hemostatic Alternative during Open Surgery*, Materials 2024, 17(17), 4318; (i.f. 3.1) (zona roșie)
24. O.D. Jucan,; R.V. H.F. Chicinas, N. Bâlc, C.O. Popa, *The Assessment of the Transversal Rupture Strength (TRS) and Hardness of WC-Co Specimens Made via Additive Manufacturing and Sinter-HIP*, Metals 2023, 13(6), Art. Nr. 1051; (i.f. 2.9) (zona galbena)
 25. A. Csapai, D.A. Toc, V. Pascalau, N. Tosa, S. Tripon, A. Ciorita, R.M. Mihaila, B. Mociran, C. Costache, C. Popa, *Study of the Influence of the Dielectrophoretic Force on the Preferential Growth of Bacterial Biofilms in 3D Printed Microfluidic Devices*, Applied Sciences 2023, 11, article nr. 60; (i.f. 2.7) (zona roșie)
 26. A. Csapai, D.A. Toc, F. Popa, N. Tosa, V. Pascalau, C. Costache, A. Botan, C. Popa, *3D Printed Microfluidic Bioreactors Used for the Preferential Growth of Bacterial Biofilms through Dielectrophoresis*, Micromachines 2022, 13(9), 1377; (if 3.523) (zona galbena)
 27. D.A. Toc, A. Csapai, F. Popa, C. Popa, V. Pascalau, N. Tosa, A. Botan, R. Mihaila, C. Costache, I. Colosi, L. Junie, *Easy and Affordable: A New Method for the Studying of Bacterial Biofilm Formation*, Cells 2022, 11(24), 4119; (if 7.666) (zona galbena)
 28. G. Thalmaier, N. Sechel, A. Csapai, C. Popa, G. Batin, A. Gabora, T. Mankovits, I. Vida – Simiti, *Aluminum Perlite Syntactic Foams*, Materials 2022, 15 (15), Art. Nr. 5446; (i.f. 3.4) (zona roșie)
 29. M. Dindelegan, V. Pascalau, M. Suciu, B. Neamtu, M. Perde-Schrepler, C. Blebea, A. Maniu, V. Necula, A. Buzoianu, M. Filip, A. Csapai, C. Popa, *Biopolymer Lipid Hybrid Microcarrier for Transmembrane Inner Ear Delivery of Dexamethasone*, Gels 2022, 8(8), 483; (i.f. 4.6) (zona roșie)
 30. W. A. Uricu, A. B. Boșca, A. M. Băbșan, H. Vermeșan, C. Cristea, M. Tertîș, P. Pășcuță, G. Borodi, M. Suciu, L. Barbu-Tudoran, C. Popa, A. Ilea, *Study on the Surface of Cobalt-Chromium Dental Alloys and Their Behavior in Oral Cavity as Cast Materials*, Materials 2022, 15(9), 3052; (i.f. 3.4) (zona roșie)
 31. A. Csapai, D.A. Toc, V. Pasacalau, V. Tosa, D. Opruta, F. Popa, C. Popa, *Study on the Effect of in Situ Surface Treatments of Medical Microfluidic Systems Obtained Through Additive Manufacturing*, Archives of Metallurgy and Materials 2022, 67(3), 1071 – 1078; (i.f. 0.6)
 32. H.F. Chicinaș, O.D. Jucan, R.V. Gădălean, G. Conțiu, A. Cotai, C. Popa, *Consolidation and Characterisation of Hard Metal Powders Milled under Dichloromethane*, Arch. Metall. Mater. 2022, 67 (2), 541-545; (i.f. 0.6)
 33. R.V. Gădălean; O.D. Jucan, H.F. Chicinaș, N. Bâlc, C. Popa, *Additive ManufActuring of WC-Co by Indirect Selective LASer Sintering (SLS) using High Bulk Density Powders*, Arch. Metall. Mater. 2022, 67(2), 577-585; (i.f. 0.6)
 34. H.F. Chicinaș, D.O. Jucan, R.V. Gădălean, G. Contiu, T.F. Marinca, P. Gotze, A. Eckert, C. Popa, *Influence of milling media on the properties of some hard metal powders*, International Journal of Refractory Metals and Hard Materials, 2021, 96, 105470 (i.f. 3.871); (zona roșie)
 35. D.O. Jucan, R.V. Gadalean, H.F. Chicinas, M. Hering, N. Balc, C. Popa, *Study on the indirect selective laser sintering (SLS) of WC-Co/PA12 powders for the manufacturing of cemented carbide parts*, International Journal of Refractory Metals and Hard Materials,

2021, Volume 96, Article number 105498, doi: 10.1016/j.ijrmhm.2021.105498; (i.f. 3.871) (zona roșie)

36. W.A. Uriciuc, H. Vermesan, A.E. Tiuc, A. Ilea, A.B. Bosca, C. Popa, *Casting over Metal Method Used in Manufacturing Hybrid Cobalt-Chromium Dental Prosthetic Frameworks Assemblies*, Materials 2021, 14(3), 539, doi: 10.3390/ma14030539; (i.f. 3.4) (zona roșie)
37. P.Jiman, A. Muntean, S. Sava, Temporary teeth dental status-high risk factor for young permanent teeth decay/Statusul odontal al dintilor temporari-factor agravant pentru riscul de carie al dintilor permanenti, Revista Romana de Stomatologie, ISSN 1843-0805 | e-ISSN 2069-6078 ISSN-L 1843-0805, 2020, LXVI(2),
38. P.Jiman, M. Moldovan, C. Sarosi, A. Muntean, A. Pop, V. Tarmure, C. Popa, A. Mohan, Surface characterization and cytotoxicity analysis of the titanium alloys for dentistry, Studia Chimica UBB, ISSN Print 0034-7752 ISSN Online 2668-8212, 2020, LXI(1), http://chem.ubbcluj.ro/~studiachimia/issues/chemia2020_1/12_Sarosi_149_162.pdf
39. P.A. Jiman, D. Prodan, M. Moldovan, A. Muntean, C. Sarosi, V. Tarmure, G. Baciut, C. Popa, A.S. Pop, New and Recovered Temporary Anchorage Devices, In Vitro Assessment of Structural and Surface Properties, Materials 2021, 14(21), 6271 <https://doi.org/10.3390/ma14216271>
40. Amalia Mazilu Moldovan, Violeta Popescu, Codruta Sarosi, Radu Silaghi Dumitrescu, Andrea Maria Chisnoiu, Marioara Moldovan, Laura Silaghi Dumitrescu, Doina Prodan, Rahela Carpa, Georgiana Florentina Gheorghe, Radu Marcel Chisnoiu, *Preparation and In Vitro Characterization of Gels Based on Bromelain, Whey and Quince Extract*, Gels 2021, 7(4), 191, ISSN 2310-2861, MDPI, doi.org/10.3390/gels7040191
41. Violeta Popescu, Andreia Molea, Marioara Moldovan, Pompilia Mioara Lopes, Amalia Mazilu Moldovan, George Liviu Popescu, The Influence of Enzymatic Hydrolysis of Whey Proteins on the Properties of Gelatin-Whey Composite Hydrogels, Materials 2021, 13(14), 3507, ISSN 1996-1944, MDPI, doi.org/10.3390/ma14133507
42. Amalia Mazilu Moldovan, Violeta Popescu, Corina Violeta Ionescu, Stanca Cuc, Antarinia Craciun, Marioara Moldovan, Diana Dudea, Anca Stefania Mesaros, *Various Aspects Involved in the Study of Tooth Bleaching Procedure: A Questionnaire-Based Study*, International Journal of Environmental Research and Public Health 2022, 19(7), 3977, ISSN 1660-4601, MDPI, doi.org/10.3390/ijerph19073977
43. Cristina Gasparik, Horațiu Alexandru Colosi, Bianca Elena Varvara, Alexandru Grațian Grecu, Alexandra Iulia Aghiorghiesei, Anca Ștefania Mesaroș, Amalia Mazilu Moldovan, Diana Dudea, *Factors Involved in the Perception of Enamel Dyschromic Lesions—A Questionnaire-Based Study*, International Journal of Environmental Research and Public Health 2022, 19(2), 900, ISSN 1660-4601, MDPI, doi.org/10.3390/ijerph19020900
44. Pompilia Mioara Purcea Lopes, Dumitrița Moldovan, Marioara Moldovan, Rahela Carpa, Codruța Saroși, Petru Pășcuță, Amalia Mazilu Moldovan, Radu Fechete, Violeta Popescu, *New Composite Hydrogel Based on Whey and Gelatin Crosslinked with Copper Sulphate*, Materials 2022, 15(15), 2611, ISSN 1996-1944, MDPI, doi:10.3390/A14ma15072611
45. Amalia Mazilu Moldovan, Violeta Popescu, Corina Violeta Ionescu, Stanca Cuc, Antarinia Craciun, Marioara Moldovan, Diana Dudea, Anca Stefania Mesaros, *Knowledge and Views on In-Office and At-Home Teeth Whitening and Associated Negative Effects in Saudi Arabia*, Turkish Journal of Dental Hygiene 2022, 2, 46-53, ISSN: 3062-3472

46. Amalia Moldovan, Stanca Cuc, Cristina Gasparik, Codruța Sarosi, Marioara Moldovan, Nicoleta Ilie, Ioan Petean, Laura Monica Rusu, Andrei Ionescu, Mihaela Pastrav, *Effect of experimental bleaching gels with enzymes on composite and enamel* , International Dental Journal, 2025, 75(2), 1234-1245, ISSN 1875-595X, <https://doi.org/10.1016/j.identj.2024.08.014>
47. Stanca Cuc, Amalia Moldovan, Marioara Moldovan, Codruta Sarosi, Smaranda Buduru, Cecilia Bacali, Doina Prodan, Viorica Lazar, Sorin Claudiu Man, *Effects of Bromelain and Papain in Tooth Whitening and Caries Removal: A Literature Review*, Dent. J. 2025, 13(3), 132; I+F19SSN: 2304-6767, <https://doi.org/10.3390/dj13030132>
48. Stanca Cuc, Codruta Sarosi, Ioan Petean, Amalia Moldovan, Cecilia Bacali, Sorin Claudiu Man, *Whitening Efficiency of Papain and Bromelain Gels in Removing Dental Stains*, Gels, 2025, 11(2), 100; ISSN: 2310-2861, <https://doi.org/10.3390/gels11020100>