

Universitatea Națională de Știință și Tehnologie POLITEHNICA București
Facultatea: Știința și Ingineria Materialelor
Departamentul: Știința Materialelor Metalice, Metalurgie Fizică
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Gradul didactic: Asistent Universitar

L I S T A

lucrărilor științifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

”Studii și cercetări privind obținerea de acoperiri pe bază de hidroxiapatită cu proprietăți de osteointegrare ridicată și proprietăți antibacteriene cu ajutorul tehnicilor electrochimice”,
Universitatea Națională de Știință și Tehnologie POLITEHNICA din București, 25 Septembrie
2023.

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

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

1. Bita, T., Corneschi, I., **Ungureanu, E.**, Bita, AI., Ignat, ND., Dura, H., Cârștoc, ID., Nicolcescu, P. - *Influence of heat treatment on microstructure and corrosion behavior of biodegradable Mg-Ca alloy*, Scientific Bulletin U.P.B., Series B - Chemistry and Materials Science, Vol. 85, Issue 4, pp. 247-260, **2023**, DOI: null, WOS:001126670800024, FI=0.5;
2. Dawod, N., Antoniac, A., Antoniac, I., Miculescu, M., Robu, A., **Ungureanu, E.**, Agop-Forna, D., Cârștoc, ID., Dura, H., Dragomir, BR. - *Corrosion behavior and microstructural analysis of some Co-Cr alloys used for metal- ceramic restorations in dentistry*, Scientific Bulletin U.P.B., Series B - Chemistry and Materials Science, Vol. 85, Issue 4, pp. 317-330, **2023**, DOI: null, WOS:001126670800025, FI=0.5;
3. **Ungureanu E.**, Vladescu (Dragomir) A., Parau A.C., Mitran V., Cimpean A., Tarcolea M., Vranceanu D.M., Cotrut C.M. - *In Vitro Evaluation of Ag- and Sr-Doped Hydroxyapatite Coatings for Medical Applications*, Materials, Vol. 16, Issue 15, **2023**, No 5428, DOI:10.3390/ma16155428, WOS:001046353100001, FI=3.4;
4. Ghica, S.I., Ghica V.G., Petrescu M.I., Iacob G., Geanta V., Buzatu M., **Ungureanu E.** - *Design of Ti-Mo-W Alloys and Its Correlation with Corrosion Resistance in Simulated Body Fluid (SBF)*, Materials, Vol. 16, Issue 6, **2023**, No 2453, DOI: 10.3390/ma16062453, WOS:000960486600001, FI=3.4;
5. Parau A.C., Juravlea G.A., Raczowska J., Vitelar C., Dinu M., Awsiuk K., Vranceanu D.M., **Ungureanu E.**, Cotrut, C.M., Vladescu A. - *Comparison of 316L and Ti6Al4V biomaterial coated by ZrCu-based thin films metallic glasses: Structure, morphology, wettability, protein adsorption, corrosion resistance, biomineralization*, Applied Surface Science, Vol. 612, **2023**, No 155800, DOI: 10.1016/j.apsusc.2022.155800 WOS:000901196000004, FI=6.7;
6. Cotrut C.M., **Ungureanu E.**, Ionescu I.C., Zamfir R.I., Kiss A.E., Parau A.C., Vladescu A., Vranceanu D.M., Saceleanu A. - *Influence of Magnesium Content on the Physico-Chemical*

Properties of Hydroxyapatite Electrochemically Deposited on a Nanostructured Titanium Surface, Coatings, Vol. 12, Issue 8, **2022**, No 1097, WOS:000846987400001, FI= 3.236;

7. Vranceanu D.M., **Ungureanu E.**, Ionescu I.C., Parau A.C., Kiss A.E., Vladescu A., Cotrut C.M - *Electrochemical Surface Biofunctionalization of Titanium through Growth of TiO₂ Nanotubes and Deposition of Zn Doped Hydroxyapatite*, Coatings, Vol.12, Issue 1, **2022**, No. 69, WOS:000765085600001, FI=2.881;
8. Angelescu M.L., Dan A., **Ungureanu E.**, Zarnescu-Ivan N., Galbinasu B.M. - *Effects of Cold Rolling Deformation and Solution Treatment on Microstructural, Mechanical, and Corrosion Properties of a Biocompatible Ti-Nb-Ta-Zr Alloy*, Metals, Vol.12, Issue 2, **2022**, No 248, WOS:000765085600001, FI=2.351;
9. Ghica S.I., Cotruț C.M, Buzatu M., Geantă V., Ghica V.G., Petrescu M.I, Iacob G., **Ungureanu E.**- *Evaluation of the corrosion resistance of TI-MO-W alloys in simulated body fluid (SBF)*, Scientific Bulletin U.P.B., Series B - Chemistry and Materials Science, Volume 84, Issue 1, Pages 189-198, **2022**, WOS:000813376200014;
10. Dragus L., Buciumeanu M., Amortila V., Comaneanu R.M., **Ungureanu E.**, Hancu V. - *Comparative evaluation of the corrosion resistance of some Co-Cr alloys used in metal-ceramic technology*, Romanian Journal of Oral Rehabilitation, Vol. 14, Issue 2, pp. 140-152 **2022**, DOI: null, WOS:000827924300018;
11. Cotrut C.M, Ionescu I.C, **Ungureanu E.**, Berbecaru A., Zamfir R.I, Vladescu A., Vranceanu D.M- *Evaluation of surface modification techniques on the ability of apatite formation and corrosion behavior in synthetic body fluid: An in vitro study*, Surfaces and Interfaces, Vol.22, No. 100866, **2021**, WOS:000615255600005, FI= 4.837;
12. Bechir F., Bataga S.M, **Ungureanu E.**, Vranceanu D.M, Pacurar M., Bechir E.S, Cotrut C.M - *Experimental Study Regarding the Behavior at Different pH of Two Types of Co-Cr Alloys Used for Prosthetic Restorations*, Materials, Vol. 14, Issue 16, **2021**, WOS:000689427700001, FI=3.623;
13. Bechir F., Bataga S.M., Tohati A., **Ungureanu E.**, Cotrut C.M., Bechir E.S., Suciuc M., Vranceanu D.M - *Evaluation of the behavior of two cad/cam fiber-reinforced composite dental materials by immersion tests*, Materials, Vol. 14, Issue 23, **2021**, No. 7185, WOS:000734878800001, FI=3.623;
14. **Ungureanu E.**, Vranceanu D.M., Vladescu A., Parau A.C., Tarcolea M., Cotrut C.M. - *Effect of doping element and electrolyte's ph on the properties of hydroxyapatite coatings obtained by pulsed galvanostatic technique*, Coatings, Vol 11, Issue 12, **2021**, No. 1522, WOS:000736213900001, FI=2.881;
15. Vranceanu, D.M, Ionescu, I.C, **Ungureanu E.**, Cojocaru M.O., Vladescu A., Cotrut C.M. - *Magnesium Doped Hydroxyapatite-Based Coatings Obtained by Pulsed Galvanostatic Electrochemical Deposition with Adjustable Electrochemical Behavior*, COATINGS, Vol. 10, Issue 8, pg. 15, **2020**, WOS:000564808400001, FI=2.436;
16. **Ungureanu E.**, Ionescu I.C, Zamfir-Andronic R.I, Vasilescu M, Milea C.G, Dobrescu M., Vranceanu D.M, Cotrut C.M -*Biofunctionalization of Ti6Al4V surface with Ag modified HAP coatings via electrochemical deposition*, Buletinul Stiintific UPB, Series B, Vol. 82, Iss. 4, **2020**, WOS:000610101300026;
17. Thanh T.T, Cotrut C.M, Vranceanu D.M, **Ungureanu E.**, Tarcolea M - *Studies of microstructure and composition of modified hydroxyapatite coatings via SEM investigations*,

Buletinul Stiintific UPB, Series B, Vol. 82, Iss. 1, Pages 145-154, **2020**, ISI Web of Knowledge, WOS:000550837300012;

18. D.M. Vranceanu, T. Tran., **E. Ungureanu**, V. Negoiescu, M. Tarcolea, M. Dinu, A. Vladescu, C.M. Cotrut - *Pulsed electrochemical deposition of Ag doped hydroxyapatite bioactive coatings o Ti6Al4V for medical purposes*, Scientific Bulletin U.P.B., Series B - Chemistry and Materials Science, vol.1, **2018**, pag. 173-184, WOS:000428112600014.

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

- Reviste

1. Ghica, Ș.I., Cosmin M. Cotruț, Buzatu, M., Antoniac IV., Geanta V., Butu M., Petrescu M.I., Stefanoiu R., **Ungureanu E.**, Iacob, G., Ionescu, R.N., *In vitro corrosion behavior of Ti-Mo-W alloys in artificial saliva*, IOP Conference Series: Materials Science and Engineering, **2019**, Vol. 572, Iss.1,012028.

- Selecție cu maximum 20 lucrări în volume de conferințe

1. D.M. Vranceanu , I. Titorencu, A. Vladescu (Dragomir), A.C. Parau, V. Pruna, **E. Ungureanu**, C.M. Cotrut - *In Vitro biological behavior of bioactive hydroxyapatite-based coatings*, , International Conference on Biomaterials and Regenerative Medicine BIOREMED'2023, 19-21 July, 2023, Sibiu, Romania;
2. **E. Ungureanu**, A. Vladescu (Dragomir), D.M. Vranceanu, I. Titorencu, A.C. Parau, V. Pruna, C.M. Cotrut - *Development and in vitro evaluation of hydroxyapatite coatings obtained by electrochemical means*, 21st International Balkan Workshop on Applied Physics and Materials Science (IBWAP 2023), 11 - 14 Iulie, **2023**, Constanța, Romania;
3. A Vladescu (Dragomir), D.M. Vranceanu, I. Titorencu, A.C.Parau, **E. Ungureanu**, C.M. Cotrut - *Physico-chemical and in vitro biological behavior of plate-like hydroxyapatite coatings obtained in pulsed galvanostatic mode*, European Materials Research Society – Spring Meeting (E-MRS 2023), Symposium H Advanced strategies for smart functional and multifunctional biomaterials and biointerfaces, May 29 to June 2, **2023**;
4. D.M. Vranceanu, I.C. Ionescu, **E. Ungureanu**, A.C. Parau, I. Titorencu, M. Badea, C. Adochite, A. Vladescu (Dragomir) and C.M. Cotruț- *In vitro evaluation of hydroxyapatite-based coatings obtained through electrochemical methods*, 9th International Conference on Materials Science and Technologies – RoMat 2020, 24-25 November **2022**, Bucharet, Romania;
5. **E. Ungureanu**, D.M. Vrânceanu, A.C. Pârâu, R. Zamfir, A. Vlădescu (Dragomir) and C. Cotrut - *Development and characterization of hydroxyapatite-based coatings obtained by electrochemical deposition*, 9th International Conference on Materials Science and Technologies – RoMat 2020, 24-25 November **2022**, Bucharet, Romania;
6. Pana, A.C. Parau, **E. Ungureanu**, J. Raczowska, C. Vitelaru, M. Dinu, K. Awsiuk, D.M. Vranceanu, C.M. Cotrut, and A. Vladescu- *ZrCu-based thin films metallic glasses with addition of Ca, Mo, Sr, Mg and Si*, 9th International Conference on Materials Science and Technologies – RoMat 2022, 24-25 November **2022**, Bucharet, Romania;
7. D.M. Vranceanu, I.C. Ionescu, **E. Ungureanu**, A.C. Parau, R.I. Zamfir, I. Titorencu, M. Badea, C. Adochite, S. Costinas, M. Idomir, A. Vladescu, C.M. Cotrut - *In vitro evaluation of doped*

hydroxyapatite coatings electrochemically deposited on titanium nanostructured surface, New Trends on Sensing- Monitoring- Telediagnosis for Life Sciences, NT SMT-LS 2022 – Sept. 8-10, **2022**, Braşov Romania;

8. D.M. Vranceanu, I.C. Ionescu, **E. Ungureanu**, A. Kiss, A.C. Parau, C.M. Cotrut - *Influence of Mg and Zn content on the properties of hydroxyapatite-based coatings*, New Trends on Sensing- Monitoring- Telediagnosis for Life Sciences, NT SMT-LS 2022 – Sept. 8-10, **2022**, Braşov Romania;
9. Diana M. Vranceanu, Ionut C. Ionescu, **Elena Ungureanu**, Anca C. Parau, Alina Vladescu, Cosmin M. Cotrut - *Biofunctionalization of titanium with titania nanotubes and doped hydroxyapatite-based coatings*, 9th International Conference Biomaterials, Tissue Engineering & Medical Devices – BiomMedD'2022, 20-22 Iulie **2022**;
10. **Ungureanu Elena**, Diana M. Vranceanu, Anca C. Parau, Vladescu Alina, Cosmin M. Cotrut - *The influence of electrolyte's pH and doping element on the properties of hydroxyapatite coatings obtained by electrochemical deposition*, 9th International Conference Biomaterials, Tissue Engineering & Medical Devices – BiomMedD'2022, 20-22 Iulie **2022**;
11. D.M. Vranceanu, I.C. Ionescu, **E. Ungureanu**, A. Kiss, G.A. Juravlea, R.I. Zamfir, I. Titorencu, A. Vladescu, C.M. Cotrut, *Physico-chemical properties and in vitro behavior of Zn doped HAP based coatings deposited on nanostructured surface*, the European Materials Research Society - E-MRS (VIRTUAL Conference) May 30 to June 3, **2022**;
12. D. M. Vranceanu, I.C. Ionescu, **E. Ungureanu**, A. Berbecaru, G.A. Juravlea, R.I. Zamfir, A. Vladescu, C.M. Cotrut - *Assessment of surface modification techniques on the corrosion behavior and the ability of apatite formation of titanium*, European Materials Research Society – Spring Meeting (E-MRS 2021), 31.05. –04.06.2021, Virtual Conference, Biomaterials and soft materials, Symposium O - Bioinspired and biointegrated materials as new frontiers nanomaterials, **2021**;
13. D. M. Vranceanu, **E. Ungureanu**, I.C. Ionescu, G.A. Juravlea, A. Kiss, A. Parau, A. Vladescu, C.M. Cotrut - *Biofunctionalization of Ti nanostructured surfaces with hydroxyapatite-based coatings intended for medical applications*, 3rd Coatings and Interfaces Conference Part of the Coatings and Interfaces series 24–26 Nov **2021**, virtual conference;
14. **E. Ungureanu***, I.C. Ionescu, G.A. Juravlea, A.A. Closca, A. Vladescu and C.M. Cotrut, *Magnesium-doped hydroxyapatite coatings obtained by electrochemical deposition with enhanced features*, 8th International Conference on Materials Science and Technologies – RoMat 2020 (virtual conference), 26-27 November **2020**, Bucharest, Romania;
15. D.M. Vranceanu, I.C. Ionescu, **E. Ungureanu**, A. Berbecaru, G.A. Juravlea, R.I. Zamfir, A. Vladescu, Cosmin Mihai Cotruţ, *Impact of surface modification techniques on the in vitro corrosion behavior and biomineralization ability of titanium*, 8th International Conference on Materials Science and Technologies – RoMat 2020 (virtual conference), 26-27 November **2020**, Bucharest, Romania;
16. Cosmin Mihai Cotruţ, Diana M. Vranceanu, **E. Ungureanu**, A. Vladescu, “*Assessment of Electrochemical Behavior in Different Media of Silver Doped Hydroxyapatite-Based Coatings Deposited on Ti6Al4V Alloy for Medical Applications*” – NACE European Corrosion Management Virtual Conference, 17-18 November, **2020**, Bucharest, Romania;
17. Diana M. Vranceanu, **E. Ungureanu**, A. Koptuyg, R. Surmenev, A. Vladescu, Cosmin Mihai Cotruţ, *Nanostructured titanium dioxide surface biofunctionalized with nano-hydroxyapatite bioceramic based coating as tailored surface*”, International Conference on Functional

Nanomaterials and Nanodevices (NANOMAT 2019), 10-14th September, **2019**, Prague, Czech Republic;

18. Diana M. Vranceanu, **Elena Ungureanu**, Mihaela Dinu, Andrey Koptug, Roman A. Surmenev, Alina Vladescu, Cosmin M. Cotrut, *Functionalization of electron beam melting manufactured surface by electrochemical deposition of hydroxyapatite*, 43rd ARA Congress, June 10-13, **2019**, Thessaloniki, Greece;
19. **E. Ungureanu**, T. Tran, M. Tarcolea, Cojocar, M. Dinu, A. Vladescu, D. Vranceanu, C. Cotrut, *Development of bioactive and bactericide coatings through electrochemical deposition of Ag and Zn doped HAp*, International Seminar on Biomaterials and Regenerative Medicine, 26-28 September, Craiova, Romania, **2019**;
20. **Elena Ungureanu**, Diana M. Vranceanu, Alina Vladescu, Andrey Koptug, Ioan G. Sandu, Mihai Tarcolea, Cosmin M. Cotrut, *Characterization of Sr- and Mg- doped hydroxyapatite coatings obtained by electrochemical deposition on porous Ti6Al4V* - 7th International Conference on Materials Science and Technologies RoMAT 2018, 15-18 November **2018**, Bucharest Romania.

E. Brevete obtinute în întreaga activitate

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Data: 21.03.2024