

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: Șef Lucrări

## **L I S T A**

### **lucrărilor științifice în domeniul disciplinelor din postul didactic**

#### **A. Teza de doctorat**

- "Contribuții în domeniul biomaterialelor resorbabile utilizabile în ortopedie", Universitatea POLITEHNICA Bucuresti, 5 Septembrie, 2012.

#### **B. Cărți si capitole în cărți publicate în ultimii 10 ani**

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

- 1 Parau, A.C., Dinu, M., Vitelaru, C., Cotrut C.M., **Vrânceanu M. Diana**, Vladescu (Dragomir), A., *Quaternary ZrCuCa-based thin films metallic glasses deposited by cathodic arc deposition*, Arabian Journal of Chemistry, **2023**,16(12), 105312, DOI; 10.1016/j.arabjc.2023.105312, Research areas: Chemistry, Citation Topics: 5 Physics, 5.88 Electromagnetism. 5.88.317 Metallic Glasses; Web of Science Categories: Chemistry, Multidisciplinary; **WOS:001091526300001**;
- 2 Ungureanu, E., Vladescu, A., Parau, A.C., Mitran V., Cimpean A., Tarcolea M., **Vrânceanu M. Diana**, Cotrut, C.M., *In Vitro Evaluation of Ag- and Sr-Doped Hydroxyapatite Coatings for Medical Applications*, Materials, **2023**, 16(15),5428; Research Areas: Chemistry, Materials Science, Metallurgy & Metallurgical Engineering, Physics; Web of Science Categories: Chemistry, Physical Materials Science, Multidisciplinary, Metallurgy & Metallurgical Engineering, Physics, Applied Physics, Condensed Matter; **WOS:001046353100001**;
- 3 Pana, I., Parau, A.C., Cotrut, C.M., Dinu M., **Vrânceanu M. Diana**, Kiss A.E., Serratore G., Bohner D.A., Vitelaru C., Ambrogio G., Beck-Sickinger, A.G., Vladescu (Dragomir), A., *Influence of deposition temperature on the structure and functional properties of Mg doped hydroxyapatite coatings deposited on manufactured AZ31B alloy substrates by RF magnetron sputtering*, Ceramics International, **2023**, 49(13), pp. 22340-22354, Research Areas: Materials Science; Web of Science Categories: Materials Science, Ceramics; **WOS:001009421400001**;
- 4 Parau, A.C., Dinu, M., Cotrut, C.M., Pana I., **Vrânceanu M. Diana**, Constantin L.R., Serratore G., Marinescu I.M., Vitelaru C., Ambrogio G., Bohner D.A., Beck-Sickinger, A.G., Vladescu, A., *Effect of Deposition Temperature on the Structure, Mechanical, Electrochemical Evaluation, Degradation Rate and Peptides Adhesion of Mg and Si-Doped Hydroxyapatite Deposited on AZ31B Alloy*, Coatings, **2023**, 13(3),591; **WOS:000958485600001**;
- 5 Parau, A.C., Juravlea, G.A., Raczkowska, J., **Vrânceanu M. Diana**, 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, **2023**, 612,155800; Research Areas: Materials Science, Physics; Web of Science Categories: Materials Science, Multidisciplinary, Materials Science, Coatings & Films, Physics, Applied; **WOS:000901196000004**;
- 6 Reclaru L., Cotrut M. Cosmin, **Vrânceanu M. Diana**, Ionescu F., *Evaluation of Galvanic and Crevice Corrosion of Watch Case Middle (1.4435 Steel) and Bottom (Panacea® Steel) Assembly Supposed to Be in Prolonged Contact with the Skin*, Coatings, **2023**, 13(5), 943; Research Areas: Materials Science, Physics, Web of Science Categories: Materials Science, Multidisciplinary, Materials Science, Coatings & Films, Physics, Applied; **WOS:000997456100001**;
  - 7 Cosmin M. Cotruț, Ungureanu E., Ionescu I.C., Zamfir R.I., Kiss AE., Parau AC., Vladescu A, **Vrânceanu M. Diana**, Saceleanu, A., *Influence of Magnesium Content on the Physico-Chemical Properties of Hydroxyapatite Electrochemically Deposited on a Nanostructured Titanium Surface*, Coatings, **2022**, Vol. 12, Iss. 8, Article No. 1097, DOI: 10.3390/coatings12081097, Research Areas: Materials Science, Physics, Web of Science Categories: Materials Science, Multidisciplinary, Materials Science, Coatings & Films Physics, Applied, **WOS:000846987400001**;
  - 8 Parau, A.C., Cosmin M. Cotruț., Guglielmi, P., Cusanno A., Palumbo G., Dinu M., Serratore G., Ambrogio G., **Vrânceanu M. Diana**, Vladescu, A., *Deposition temperature effect on sputtered hydroxyapatite coatings prepared on AZ31B alloy substrate*, Ceramics International, **2022**, Vol. 48, Iss. 8, pp. 10486-10497, DOI: 10.1016/j.ceramint.2021.12.258, Research Areas: Materials Science, Web of Science Categories: Materials Science, Ceramics, **WOS:000781811100002**;
  - 9 **Vrânceanu M. Diana**, Ungureanu, E., Ionescu, A.C., Parau AC., Kiss AE., Vladescu, A., Cosmin M. Cotruț, *Electrochemical Surface Biofunctionalization of Titanium through Growth of TiO<sub>2</sub> Nanotubes and Deposition of Zn Doped Hydroxyapatite*, Coatings, **2022**, Vol. 12, Iss. 1, Article No. 69, DOI: 10.3390/coatings12010069, Research Areas: Materials Science, Physics, Web of Science Categories: Materials Science, Multidisciplinary, Materials Science, Coatings & Films Physics, Applied, **WOS:000747506800001**;
  - 10 Fischer, C.A.I., Baciuc, F., **Vrânceanu M. Diana**, Zamfir Raluca I., Costin Coman, Comaneanu, R.M., Ghergic, D.L., *Evaluation of the force retention within the telescopic crowns with different taper angles by finite element analysis*, UPB Scientific Bulletin, Series B: Chemistry and Materials Science, **2022**, 84(3), pp. 169-178, Research Areas: Chemistry; Web of Science Categories: Chemistry, Multidisciplinary; **WOS:000961046800016**;
  - 11 A.C. Parau, C.M. Cotrut, P. Guglielmi, A. Cusanno, G. Palumbo, M. Dinu, G. Serratore, G. Ambrogio, **Diana M. Vrânceanu**, A. Vladescu, *Deposition temperature effect on sputtered hydroxyapatite coatings prepared on AZ31B alloy substrate*, Ceramics International, **2022**, Vol. 48, Iss. 8, pp. 10486-10497, DOI: 10.1016/j.ceramint.2021.12.258, Research Areas: Materials Science, Web of Science Categories: Materials Science, Ceramics, **WOS:000781811100002**;
  - 12 E. Ungureanu, **Vrânceanu M. Diana**, A. Vladescu, A.C. Parau, M. Tarcolea, C.M. Cotrut, *Effect of Doping Element and Electrolyte's pH on the Properties of Hydroxyapatite Coatings Obtained by Pulsed Galvanostatic Technique*, Coatings, Vol. 11, Nr. 12, Article No. 1522, DOI: 10.3390/coatings11121522, Research Areas: Materials Science, Physics, **WOS:000736213900001**;

- 13 Cosmin M. Cotruț, Ionescu, I.C., Ungureanu, E., Berbecaru A., Zamfir R.I., Vladescu, A., **Diana M. Vrânceanu**, *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*, **2021**, Vol. 22, Article No. 100866, 10.1016/j.surf.2020.100866, Research Areas Chemistry Materials Science Physics, Web of Science Categories, Chemistry, Physical Materials Science, Coatings & Films Physics, Applied Physics, Condensed Matter **WOS:000615255600005**
- 14 Bechir, F., Bataga, S.M., Tohati, A., Ungureanu E., Cotrut C.M., Bechir E.S., Suci, M., **Diana M. Vrânceanu**, *Evaluation of the behavior of two CAD/CAM fiber-reinforced composite dental materials by immersion tests*, *Materials*, 2021, Vol. 14, Iss. 23, Article No. 7185, DOI10.3390/ma14237185; Document Type: Article; Research Areas: Chemistry, Materials Science, Metallurgy & Metallurgical Engineering, Physics, **WOS:000734878800001**,
- 15 Fischer, P., Barbu, H.M., Fischer, C.A.I., Pantea M., Baciu F., **Diana M. Vrânceanu**, Cotrut, C.M., Spinu, T.C., *Bending fracture of different zirconia-based bioceramics for dental applications: A comparative study*, *Materials*, 2021, Vol. 14, Iss. 22, Article No. 6887, DOI10.3390/ma14226887, Document Type: Article; Research Areas: Chemistry, Materials Science, Metallurgy & Metallurgical Engineering, Physics, **WOS:000727684300001**,
- 16 Bechir, F., Bataga, S.M., Ungureanu, E., **Diana M. Vrânceanu**, 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* 2021, Vo. 14, Iss. 15, Article No. 4635, DOI: 10.3390/ma14164635, Document Type: Article; Research Areas: Chemistry, Materials Science, Metallurgy & Metallurgical Engineering, Physics, **WOS:000689427700001**
- 17 **Diana M. Vrânceanu**, 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*, **2020**, Vol. 10, Iss. 8., Article Number 727,; 10.3390/coatings10080727; Document Type: Article; Research Areas: Materials Science; Web of Science Categories: Materials Science, Coatings & Films; **WOS:000564808400001**;
- 18 Visan A.I., Popescu-Pelin G., Gherasim O., Mihailescu A., Socol M., Zgura I., Chiritoiu M., Sima L.E., Antohe F., Ivan L., Vrânceanu D.M., Cosmin **Cosmin M. Cotrut**, Cristescu R., Socol G., *Long-Term Evaluation of Dip-Coated PCL-Blend-PEG Coatings in Simulated Conditions*, *Polymers*, 2020, Vol. 12., Iss. 3., Article number 717; DOI: 10.3390/polym12030717; Document Type: Article; Research Areas: Polymer Science; Web of Science Categories: Polymer Science **WOS:000525952000216**;
- 19 Vladescu A., Parau A.C., Pana I., Cotrut M. Cosmin, Constantin L.R., Braic V., **Diana M. Vrânceanu**, *In vitro activity assays of sputtered HAp coatings with SiC addition in various simulated biological fluids*, *Coatings*, **2019**, Vol. 9, Iss. 6, Article number 389; **F.I.2019 = 2.330**; DOI: 10.3390/coatings9060389; Document Type: Article; Research Areas: Materials Science; Web of Science Categories: Materials Science, Coatings & Films; **WOS:000473753000044**;
- 20 **Diana M. Vrânceanu**, Anca C Parau, Cosmin M Cotrut, Adrian E Kiss, Lidia R Constantin, Viorel Braic, Alina Vladescu, *In vitro evaluation of Ag doped hydroxyapatite coatings in acellular media*, *Ceramics International*, 2019, Vol. 45, Iss. 8, pp.11050-11061; **F.I.2018 = 3.450**; DOI: 10.1016/j.ceramint.2019.02.191; Document Type: Article; Research Areas: Materials Science; Web of Science Categories: Materials Science, Ceramics **WOS:000465058500170**;
- 21 Cosmin M Cotrut, A. Vladescu, M. Dinu, **Diana M. Vrânceanu**, *Influence of deposition temperature on the properties of hydroxyapatite obtained by electrochemical assisted deposition*, *Ceramics International*, **2018**, Vol. 44, Iss. 1, pp. 669-677; **F.I.2019 = 3.450**; DOI: 10.1016/j.ceramint.2017.09.227 Document Type: Article; Research Areas: Materials Science;

Web of Science Categories:Materials Science, Ceramics; **WOS:000416877900091**;

- 22 A. Vladescu **Diana M. Vrânceanu**, S. Kulesza, A. N. Ivanov, M. Bramowicz, A.S. Fedonnikov, M. Braic, I.A. Norkin, A. Koptyug, M. Kurtukova, M. Dinu, I. Pana, M.A. Surmeneva, R.A. Surmenev, Cosmin M Cotrut, *Influence of the electrolyte's pH on the properties of electrochemically deposited hydroxyapatite coating on additively manufactured Ti64 alloy*, Scientific reports, **2017**, 7(1), **F.I.2019 = 4,011**; Article Number: 16819, DOI: 10.1038/s41598-017-16985-z; Research Document Type:Article; Areas:Science & Technology - Other Topics; Web of Science Categories:Multidisciplinary Sciences; **WOS:000416938200127**;
- 23 T.M. Mukhametkaliyev, M.A. Surmeneva, A. Vladescu, Cosmin M Cotrut, M. Braic, M. Dinu, **Diana M. Vrânceanu**, I. Pana, M. Mueller, R.A. Surmenev, *A biodegradable AZ91 magnesium alloy coated with a thin nanostructured hydroxyapatite for improving the corrosion resistance*, Materials Science and Engineering C 75 (2017) 95–103, **F.I.2019 = 4,959**; DOI: 10.1016/j.msec.2017.02.033, Document Type: Article; Research Areas: Materials Science; Web of Science Categories: Materials Science, Biomaterials; **WOS:000400720800013**;
- 24 Cosmin M Cotrut, L Braic, **Diana M. Vrânceanu**, A. Kiss, M. Dinu, M. Balaceanu, V. Braic, A. Vladescu, *Influence of the annealing treatment on the structure, morphology, and corrosion resistance of sputtered Zr-Ti-Si-O coatings used for biomedical applications*, Materials And Corrosion-Werkstoffe Und Korrosion 68 (5) (2017) 552-559, **F.I.2019 = 1,458**; DOI: 10.1002/maco.201609200, Document Type: Article, Research Areas:Materials Science; Metallurgy & Metallurgical Engineering, **WOS:000400648400006**;
- 25 Cosmin M Cotrut, A.C. Parau, A.I. Gherghilescu, I. Titorencu, I. Pana, D.V. Cojocoru, V. Pruna, L. Constantin, I. Dan, **Diana M. Vrânceanu**, A. Vladescu, *Mechanical, In Vitro Corrosion Resistance and Biological Compatibility of Cast and Annealed Ti25Nb10Zr Alloy*, Metals 7(3) 86 (2017), **F.I.2019 = 2,259**; Article Number 86, DOI: 10.3390/met7030086, Document Type: Article, Research Areas:Materials Science; Metallurgy & Metallurgical Engineering, **WOS:000397261600018**;
- 26 **Diana M. Vrânceanu**, Cosmin M Cotrut, M. Bramowicz, I. Titorecu, S. Kulesza, A. Kiss, A. Berbecaru, V. Pruna, M. Branzei, A. Vladescu, *Osseointegration of sputtered SiC-added hydroxyapatite for orthopaedic applications*, Ceramics International, vol. 42 (8), **2016**, pag. 10085-10093, **F.I.2019 = 3,450**; DOI: 10.1016/j.ceramint.2016.03.114, Document Type: Article, Research Areas: Materials Science, **WOS:000374811600099**;
- 27 Ungureanu, E., Ionescu, I.C., Zamfir-Andronic, R.I., Vasilescu M., Milea C., Dobrescu M., Vrânceanu, D.M., **Cosmin M. Cotrut**, *Biofunctionalization of Ti6Al4V surface with Ag modified HAp coatings via electrochemical deposition*, UPB Scientific Bulletin, Series B: Chemistry and Materials Science, **2020**, Vol. 82, Iss. 4), pp. 307-324; Document Type: Article, Research Areas:Chemistry, Web of Science Categories: Chemistry, Multidisciplinary, **WOS:000610101300026**
- 28 Tran T.T., Nichita N.B., Dobrica M-O., Cotrut C.M., **Diana M. Vrânceanu**, Tarcolea M., *In vitro biocompatibility investigation of silver and zinc modified hydroxyapatite deposited on implant materials*, U.P.B. Sci. Bull. Series B, **2020**, 82 (3), 231-248;
- 29 Tran T.T., Cotrut C.M., **Diana M. Vrânceanu**, Ungureanu E., Tarcolea M., *Studies of microstructure and composition of modified hydroxyapatite coatings via SEM investigations*, U.P.B. Sci. Bull. Series B, **2020**, 82 (1), 145-154; esearch Areas:Chemistry, Web of Science Categories: Chemistry, Multidisciplinary, **WOS:000550837300012**;
- 30 **Diana M. Vrânceanu**, T. Tran, E. Ungureanu, V. Negoiescu, M. Tarcolea, M. Dinu, A. Vladescu, R. Zamfir, A.C. Timotin, Cotrut C.M., *Pulsed electrochemical deposition of Ag doped*

*hydroxyapatite bioactive coatings on Ti6Al4V for medical purposes*, U.P.B. Sci. Bull. Series B, **2018**, 80 (1), 173-184; eSearch Areas: Chemistry, Web of Science Categories: Chemistry, Multidisciplinary; **WOS:000428112600014**;

- 31** Geantă, V., Voiculescu, I., Istrate, B., **Diana M. Vrânceanu**., Ciocoiu, R., Cotru C.M., *The influence of chromium content on the structural and mechanical properties of AlCr<sub>x</sub>FeCoNi high entropy alloys*, In International Journal of Engineering Research in Africa, **2018**, 37, 23-28; **WOS:000444288100003**
- 32** M. Târcolea, D. Vlăsceanu, C.M. Cotrut, **Diana M. Vrânceanu**, R.M. Comăneanu, *Mechanical Effects of Simulated Pressure and Temperature Conditions on Porcelain Dental Bridges*, Solid State Phenomena, **2014**, 216, 157-162; **WOS:000347924100027**
- 33** M. Dinu, V. Braic, G. Coleașe, F. Baciuc, C.M. Cotruț, M. Braic, M. Târcolea, C. Vițelaru, A. Vlădescu, **Diana M. Vrânceanu**, *TiSiN coatings for improved bond strength of CoCr alloy to dental ceramic*, Key Engineering Materials, **2014**, 587, 275-281; **WOS:000336185000045**;
- 34** C.M. Cotruț, S. Ciucă, F. Miculescu, I. Antoniac, M. Târcolea, **Diana M. Vrânceanu**, *The Influence of Classical and Modern Manufacturing Technologies on the Properties of Metal Dental Bridges*, Key Engineering Materials, **2014**, 583, 163-168; **WOS:000336552600027**

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

##### **- Reviste**

##### **- Selecție cu maximum 20 lucrări în volume de conferințe**

1. **Diana M. Vrânceanu**, 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 BioReMed 2023, 19-21 Iulie **2023**, Sibiu, Romania;
2. **Diana M. Vrânceanu**, I.C. Ionescu, E. Ungureanu, A. Kiss, GA Juravlea, RI Zamfir, I. Titorencu, A. Vladescu, CM Cotrut, *Physico-chemical properties and in vitro behavior of Zn doped HAp based coatings deposited on nanostructured surface*, EMRS Spring Meeting 2021, Virtual Conference, May 30 – June 3, **2022**.
3. **Diana M. Vrânceanu**, I.C. Ionescu, E. Ungureanu, A. Vladescu, CM. Cotrut, *Biofunctionalization of titanium with titania nanotubes and doped hydroxyapatite-based coatings*, 9<sup>th</sup> International Conference “Biomaterials, Tissue Engineering & Medical Devices” BiomMedD’2022, 20 – 23 July, **2022**, Bucharest, Romania;
4. **Diana M. Vrânceanu**, E. Ungureanu, I.C. Ionescu, GA Juravlea, A. Kiss, AC Parau, A. Vladescu, CM. 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**, on-line virtual conference
5. **Diana M. Vrânceanu**, I.C. Ionescu, E. Ungureanu, A. Berbecaru, G.A. Juravlea, R.I. Zamfir, A. Vladescu and C.M. Cotrut, *Assessment of surface modification techniques on the corrosion behavior and the ability of apatite formation of titanium*, EMRS Spring Meeting 2021, Virtual Conference, May 31 – June 3, **2021**.
6. I.C. Ionescu, **Diana M. Vrânceanu**, D. Tabaras, E. Ungureanu, A. Berbecaru, M.O. Cojocar, A.C. Parau, A. Vladescu, C.M. Cotrut, *Bioactivation through duplex treatment of*

*titanium based surface intended for biomedical applications*, 1<sup>st</sup> International Conference „Medical Materials Science & Engineering – BIOMAT”, 20-23 February, **2020**, Predeal, Romania;

7. I.C. Ionescu, **Diana M. Vrânceanu**, E. Ungureanu, A. Berbecaru, A.C. Parau, A. Vladescu, M. Cojocaru, C.M. Cotrut, *Nanostructured titanium dioxide surface biofunctionalized with nano-hydroxyapatite bioceramic based coating as tailored surface*, International Functional Nanomaterials and Nanodevices Conference – NanoMat 2019, 11-13 September **2019**, Prague. Czech Republic;
8. Caroline A. I. Fischer, **Diana M. Vrânceanu**, Florin Baci, Stefan A. Ilaș, R.M. Comaneanu, Doina L. Ghergic, Cosmin M. Cotrut, *Assessment of force retention in telescopic systems designed with different taper angle*; The 43<sup>rd</sup> ARA Congress, 10-13 June, **2019**, Thessaloniki, Greece;
9. **Diana M. Vrânceanu**, Elena Ungureanu, Mihaela Dinu, Andrey Koptuyg, Roman A. Surmenev, Alina Vladescu, Cosmin M. Cotrut, *Electrochemical deposition of bioactive hydroxyapatite coating on electron beam melting manufactured surface*; 7<sup>th</sup> International Conference on Materials Science and Technologies – RoMat 2018, 15-18 November, **2018**, Bucharest, Romania;
10. **Diana M. Vrânceanu**, Andrey Koptuyg, Alina Vladescu, Roman A. Surmenev, Elena Ungureanu, Cosmin M. Cotrut, *Bioactivation of additively manufactured Ti based alloy with HAp coatings obtained by electrochemical deposition*, 8<sup>th</sup> International Conference “Biomaterials, Tissue Engineering & Medical Devices” BiomMedD’2018, 27 – 29 September **2018**, Cluj, Romania;
11. A. Vladescu, A. Parau, A.I. Gherghilescu, **Diana M. Vrânceanu**, A. Kiss, I. Pana, C.M. Cotrut, *Improvement of the adhesion between hydroxyapatite and Ti alloy substrate*, 28<sup>th</sup> Annual Conference of the European Society for Biomaterials (ESB), 2-8 September **2017**, Athena, Greece;
12. C.M. Cotrut, A.C. Parau, I. Titorencu, A. Vladescu, L.R. Constantin, I. Dan, **Diana M. Vrânceanu**, M. Braic, *Development of novel Ti-Nb-Zr alloy for medical proposes*, 28<sup>th</sup> Annual Conference of the European Society for Biomaterials (ESB), 2-8 September **2017**, Athena, Greece
13. **Diana M. Vrânceanu**, M. Dinu, F.A. Azem, R. Abdulgader, V. Braic, I. Birlik, A. Kiss, C.M. Cotrut, R. Booyesen, M. Braic, T.K. Monsees, A. Vladescu, *Synthesis of sputtered SiC and Mg doped hydroxyapatite coatings for biomedical applications*, EMRS 2017 Spring Meeting, May 22-26, 2017, Strasbourg, France;
14. **Diana M. Vrânceanu**, A. Vladescu, M. Tarcolea, Cosmin M. Cotrut, *Evaluation of surface treatment effect on roughness through in vitro bioactivity test in simulated body fluid*, 6<sup>th</sup> International Conference on Materials Science and Technologies – RoMat 2016”, 9 - 12 November **2016**, Bucharest, Romania
15. M. Pantea, **Diana M. Vrânceanu**, F Baci, C.M. Cotruț, I.A. Antoniac, T. Traistaru, *PFZ bond strength evaluation after ZrO<sub>2</sub> surface treatments*; The 28<sup>th</sup> Symposium and Annual Meeting of the International Society for Ceramics in Medicine –BIOCERAMICS 28, 18-21 October, **2016**, Charlotte, North Carolina, USA;
16. **Diana M. Vrânceanu**, A.I. Gherghilescu, A. Berbecaru, G. Țepes, C.M. Cotruț, *Calcium phosphate coatings deposited on Ti substrate using electrochemically assisted deposition*,

11th Conference for Young Scientists in Ceramics, Faculty of Technology Novi Sad, University of Novi Sad, Serbia, October 21-24, **2015**

17. C. Cotrut, I. Titorencu, A. Kiss, M. Tarcolea, F. Miculescu, **Diana M. Vrânceanu**, A. Vladescu, *Enhancement of Osseointegration of Ti Based Alloy by Bioactive Calcium Phosphate Coatings*, 27th European Conference on Biomaterials ESB'2015, 30 August - 3 September **2015**, Krakow, Poland;
18. M. Dinu, M Tarcolea, MG Panaite, **Diana M. Vrânceanu**, *Chromium oxynitride thin film as adhesion inter-layers between metal and ceramic for dental restorations*, 11<sup>th</sup> International Conference on Nanosciences & Nanotechnologies (NN15) 7-10 July **2015**, Thessaloniki, Greece;
19. C.M. Cotrut, M. Braic, M. Dinu, **Diana M. Vrânceanu**, M. Tarcolea, M. Balaceanu, *Addition of TiSiN interlayer between dental ceramic and NiCr and CoCr support in dental restorations*, 30<sup>th</sup> European Conference on Surface Science, ECOSS-30, 31 August - 5 September **2014**, Antalya, Turkey
20. A.I. Gherghilescu, M. Dinu, T. Petreus, A. Kiss, G. Colease, **Diana M. Vrânceanu**, CM Cotrut, *The influence of CoCrMo alloy roughness on the corrosion behavior and biocompatibility*, BiomMedD'2014, 17-20 septembrie, **2014**, Constanta, Romania;

#### **E. Brevete obținute în întreaga activitate**

1. Vladescu A., **Vrânceanu M. Diana**, Cotrut CM., Parau AC., Constantin LR., *"Material biocompatibil sub forma de straturi subtiri pe baza de hidroxiapatita dopata cu Si, Ti si/sau Ag"*, **BREVET OSIM Nr. 133549 /2023**;
2. Cosmin M. Cotruț, **Diana Maria Vranceanu**, Alina Vladescu, *Acoperiri bioactive de hidroxiapatită obținute prin electrodepunere utilizate în scopuri medicale*, **BREVET OSIM Nr. 133246 / 2022**.

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