

Universitatea Națională de Știință și Tehnologie POLITEHNICA București

Facultatea:

Departamentul:

Nume Prenume:

Gradul didactic:

L I S T A

lucrărilor științifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

T1 “OTELURI INOXIDABILE FERITICE CU REZISTENTA IMBUNATATITA LA COROZIUNE”, 1995

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

1. **Alexandra Banu**, Octavian Radovici, Elemente de stiinta si ingineria suprafetei, Ed. Printech, Bucuresti, ISBN 978-606-23-0144-6, 2013

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

1. Andra Ionela Ghizdareanu, Diana Pasarin, Alexandra Banu, Andreea Ionita (Afilipoaei), Cristina Emanuela Enascuta and Alexandru Vlaicu, Accelerated Shelf-Life and Stability Testing of Hydrolyzed Corn Starch Films. *Polymers* 2023, 15, 889. <https://doi.org/10.3390/polym15040889> **IF 5**
2. Diana Pasarin, Andra-Ionela Ghizdareanu*, Florina Teodorescu, Camelia Rovinaru, Alexandra Banu, Characterization of Pectin Oligosaccharides Obtained from Citrus Peel Pectin, *Fermentation* 2023, 9(3), 312; <https://doi.org/10.3390/fermentation9030312> **IF 3.7**
3. G Dobri, A Berbecaru, A Paraschiv, V Geanta, S Ciuca, A Banu, The effect of tantalum content on microstructure and vickers hardness of TiNbZrTaAg alloy, *UPB Sci. Bull. Ser. B*, 2023, 85, 167-178
4. G Dobri, A Banu, C Donath, M Marcu, The Influence of the Tantalum Content on the Main Properties of the Ti₉Ta₉Nb₈Zr₂Ag Alloy, *Metals* (2023) 13 (7), 1294 <https://doi.org/10.3390/met13071294> **IF 2.9**
5. Andrei-Ionut PERDUM, and Alexandra BANU, THE INFLUENCE OF WATER ABSORPTION ON REINFORCED POLYMERS (FRP) USING MWCNT AND HGB, *Revue Roumaine de Chimie.*, 2023, 68(1–2), 101–107 DOI: 10.33224/rrch.2023.68.1-2.10, <https://www.icf.ro/rrch/> Rev. Roum. Chim **IF 0.459**
6. Gabriel DOBRI, Alexandra BANU,* Gavril GHEORGHIEVICI, Luiza CAPRAD and Maria MARCU, CORROSION BEHAVIOR OF A COBALT ALLOY WITH LESS CHROMIUM AND MOLYBDENUM CONTENT IN LACTIC ACID ENVIRONMENT, *Rev. Roum. Chim.*, 2022, 67(6-7), 415–423 DOI: 10.33224/rrch.2022. 67.6-7.08 **IF 0.459**
7. Alexandra Banu, Loredana Preda, Maria Marcu, Luciana Laura Dinca, Monica Elisabeta Maxim, and Gabriel Dobri, Electrochemical Behavior of SLM Ti–6Al–4V Alloy After Long Time of Immersion in Lactic Acid Environment, <https://doi.org/10.1007/s11661-022-06648-8>, *METALLURGICAL AND MATERIALS TRANSACTION A*, April, 2022 **IF 2.801**
8. Elena Madalina Mihai, Iuliana Mihalache ,Anca-Ionela Istrate ,Cristina Antonela Banciu ³,Cosmin Romanitan ,Oana Brincoveanu,Eugenia Tanasa, Alexandra Banu and Lucia Monica Veca, **Self-Sustained** Three-Dimensional Macroporous TiO₂-Graphene Photocatalyst for Sunlight Decolorization of Methyl Orange, *Nanomaterials* 2022, 12(24), 4393; <https://doi.org/10.3390/nano12244393> (registering DOI) **IF 6.719**

9. Perdum, Andrei-Ionut (Perdum, Andrei-Ionut) ; Banu, Alexandra (Banu, Alexandra) ; Trusca, Roxana (Trusca, Roxana) ; Marinescu, Cornelia (Marinescu, Cornelia), Hollow glass microspheres treated with silane coupling agent, University Politehnica of Bucharest Scientific Bulletin series B-chemistry and materials science, Volume 84 Issue 4 Page 169-180 Published 2022
10. Elena Madalina Mihai, Anca-Ionela Istrate, Octavian Gabriel Simionescu, Cristina Banciu, Cosmin Romanitan, Florin Comanescu, Alexandra Banu, L.Monica Veca, Synthesis of TiO₂/GF-Ni hybrid materials by a combined chemical vapor deposition/ RF Magnetron Sputtering approach, U.P.B. Sci. Bull., Series B, Vol. 83, Iss. 4, **2021**, ISSN 1454-2331
11. Alexandra BANU, Alexandru PARASCHIV, Simona PETRESCU, Irina ATKINSON, Elena Maria ANGHEL, Maria MARCU, Isothermal Oxidation Behavior of Novel Al₂O₃ / NiCrAlY / Ti₃Al System at 850°C, Rev. Chim., 71 (5), **2020**, 106-116, <https://doi.org/10.37358/RC.20.5.8118>
12. Alexandru PARASCHIV, Alexandra BANU, Cristian DOICIN, Ion IONICA, Isothermal oxidation behavior of plasma sprayed conventional and nanostructured YSZ thermal barrier coatings, U.P.B. Sci. Bull., Series B, Vol. 82, Iss. 2, **2020** ISSN 1454-2331
13. Alexandra Banu, Maria Marcu, Oana Trusca, Alexandru Paraschiv, Elena Maria Anghel & Irina Atkinson Characterization of NiCrFeSiBC Coating During Long-Term Isothermal Oxidation at 850° C, Journal of Thermal Spray, 28, pages1275–1283(**2019**)- Springer DOI.org/10.1007/s11666-019-00881-1 ISI galben Q2
14. A Banu, M Marcu, C Juganaru, P Osiceanu, M Anastasescu, L Capra, Corrosion behavior of CoCrMoW cast alloy in lactic acid environment for surgical applications, Arabian Journal of Chemistry (**2019**) 12 (8), 2007-2016 ISI rosu Q1
15. Cristian Predescu, Sorin Ciuca, Andra Predescu*, Alexandra Banu, Cristian Pantelimon, Ecaterina Matei, Mirela Sohaciu, Andrei Berbecaru, George Coman, Structure and Properties of Some Metallic Biomaterials from System Ti-Nb-Fe Used in Implantology, REV.CHIM.(Bucharest)♦69♦No. 3 ♦2018, pg 557, ISSN: 0034-7752 , IF 1,412 WOS:000430946500005
16. Alexandra Banu, Maria Marcu, Simona Petrescu, Nicolae Ionescu, and Alexandru Paraschiv, Effect of niobium alloying level on the oxidation behavior of titanium aluminides at 850°C, International Journal of Minerals, Metallurgy and Materials Volume 23, Number 12, December 2016, Page 1 DOI: 10.1007/s12613-016-0000-0, WOS:000390006500012 ISI galben Q2
17. Elena MariaAnghel, MariaMarcu, AlexandraBanu, IrinaAtkinson, AlexandruParaschiv, Simona Petrescu, Microstructure and oxidation resistance of aNiCrAlY/Al₂O₃-sprayed coating onTi-19Al-10Nb-V alloy, CERAMICS INTERNATIONAL Volume: 42 Issue: 10 Pages: 12148-12155, ISSN: 0272-8842, Accession umber: WOS:000377733500080 doi.org/10.1016/j.ceramint.2016.04.148, ISI rosu Q1
18. M. Marcu, A. Banu, E.M. Anghel, A. Paraschiv, Corrosion Behavior of a Thermally Oxidized Orto-Titanium Aluminide in Synthetic Seawater, Int. J. Electrochem. Sci., 10 (2015) pg. 8284 – 8297, ISSN: 1452-3981, Accession Number: WOS:000366177100033, ISI galben Q2
19. Alexandra Banu, Maria Marcu, Elvira Alexandrescu, Elena Maria Anghel, Electrochemical deposition and characterization of Polypyrrole coatings doped with nickel cobalt oxide for environmental applications, J Solid State Electrochem,2014, Volume: 18 Issue: 10 Pages: 2661-2671, ISSN: 1432-8488, DOI 10.1007/s10008-014-2492-1, Accession WOS:000342414600002, ISI galben Q2
20. Alexandra Banu, Maria Marcu, Anticorrosion Behaviour of Polypyrrole Doped with Nickel Cobalt Oxide used as a Primer on Ferritic Stainless Steel in Different Environments, Revista de Chimie, 65, nr. 2, 2014, pg. 210-214, ISSN: 0034-7752, Accession WOS:000333577400018

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

- Reviste

1. Daniela-Magdalena Ciobotaru, Alexandra Banu, Characterization of Ti6Al4V alloy for corrosion behavior in mayer-fusayama artificial saliva, Bull UPB, Vol. 78, Iss. 3, 2016, pg. 201-212 WOS

2. Marcu, Anamaria Liliana; Popescu, Oana-Cornelia; Ghiculescu, Liviu Daniel; Banu, Alexandra, RESEARCHES ON THE BEHAVIOR OF ECOLOGICAL DIELECTRIC LIQUIDS AT CLASSIC AND ULTRASONICALLY AIDED EDM, Nonconventional Technologies Review / Revista de Tehnologii Neconventionale . Dec2019, Vol. 23 Issue 4, p95-13. 9p.
3. Marian-Ionuț Dragomir¹, Oana-Cornelia Popescu², Alexandra Banu³, Liviu Daniel Ghiculescu, EXPERIMENTAL RESEARCH OF ECOLOGICAL DIELECTRIC LIQUID IN ELECTRICAL DISCHARGE MACHINING, Nonconventional Technologies Review ©2020 Romanian Association of Nonconventional Technologies, Romania, March 2020
4. Andrei Gheorghe, Dana Lepădatu, Daniel Ghiculescu, and Alexandra Banu, STUDY OF ELECTROCHEMICAL BEHAVIOR AND SMOOTHING OF ADVANCED ALLOY Ti6Al4V WITH ULTRASONIC WAVES , Nonconventional Technologies Review ©2020 Romanian Association of Nonconventional Technologies, Romania, March, 2020
5. Alexandra Banu, Alexandru Paraschiv, Luminita Georgescu, Cristina Juganaru, High Temperature Behavior of Two Titanium Aluminides for Blade Engine Applications. Preliminary Study, Lecture Notes in Electrical, 2018, Engineering book series (LNEE, volume 428), DOI https://doi.org/10.1007/978-3-319-53934-8_8, Publisher Name Springer, Cham

- Selecție cu maximum 20 lucrări în volume de conferințe

1. M Eftimie, A Filip and A Banu, Theoretical calculus of the mechanical strength of binary oxide glasses 10th International Conference on Advanced Manufacturing Technologies, IOP Conf. Series: Materials Science and Engineering **682** (2019) 012008, IOP Publishing, doi:10.1088/1757-899X/682/1/012008
2. *Luciana Laura Dincă* (Shamieh) Boulven , *Alexandra Banu*¹, *Gizem Nur Soylu*², *Gabriel Dobri*¹ and *Madalina Elena Mocirla* (Mihai), The effects of growth TiO₂ nanotubes on forged Ti6Al4V alloy and selective laser sintered Ti6Al4V alloy surfaces for environment and medical applications, MATEC Web of Conferences **299**, 01005 (2019) <https://doi.org/10.1051/mateconf/201929901005>
3. *Alexandra Banu*, *Madalina Mocirla*¹, and *Gizem Nur Soylu* , Preliminary Study of Electrochemical Advanced Oxidation of Organic Dyes on TiO₂, MATEC Web of Conferences 299, 01002 (2019) <https://doi.org/10.1051/mateconf/201929901002>
4. *Luciana Laura Dincă**, *Alexandra Banu*, *Aurelian Vișan* and *Nicolae Ionescu*, AHP method to determine the optimal technological variant for maxillofacial implant fabrication, MATEC Web of Conferences 178, 03012(2018) <https://doi.org/10.1051/mateconf/201817803012>
5. *Luciana Laura Dincă*, *Alexandra Banu* and *Aurelian Vișan*, Additive manufacturing in maxillofacial reconstruction, MATEC Web of Conferences 137, 02001 (2017) DOI: 10.1051/mateconf/201713702001
6. Alexandra Banu, Cristina Juganaru, and Maria Marcu Electrochemical and corrosion behavior of two chromium dental alloys in artificial bioenvironments, MATEC Web Conf. Volume 112, 2017, 21st Innovative Manufacturing Engineering & Energy International Conference – IManE&E 2017,

E. Brevete obținute în întreaga activitate

- B1. Marinescu Nicolae Ion, Ghiculescu daniel liviu, Banu Alexandra, Tarba Ioan Cristian, Juganaru elena Cristina, Echipament pentru prelucrare electrochimica asistata de ultrasunete, BREVET DE INVENTIE nr.130676/28.05.2021
- B2. Marinescu Nicolae-Ion, Ghiculescu Liviu Danil, **Banu Alexandra**, Nanu Sergiu, Echipament mobil pentru prelucrare și lustruire electrochimică asistate de ultrasunete, Hotarirea OSIM 4255/29.11.2018 Brevet nr 128982, 2019
- B3. Bejan, Florin I, Scortanu, Aurelia, Miclosi, Viorel, Gutu, Mihai, Nuta, Doina, **Banu, Alexandra**, Marinescu, Constantin, 1986, BREVET DE INVENTATOR nr.89185 “Oteluri inoxidabile feritice”; indexat CAPLUS

A1 Florentina Ionescu, **Alexandra Banu**, CERTIFICAT DE INOVATOR nr 65/1989- MICM
_”Procedeu de obtinere a benzilor din otel cu ecruisare controlata”

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Semnătura: