

# LISTA DE LUCRĂRI

Dr. Ing. Ștefan-Constantin LUPESCU

## 1. Lucrări publicate

### a) Reviste cotate ISI:

1. Carmen Nejnaru, Ramona Cimpoesu, Petrica Vizureanu, Elena-Luiza Epure, Manuela Cristina Perju, Ștefan-Constantin Lupescu, Study on the Thermal Fatigue Effect of Carboxymethylcellulose Solution Media Dissolved in Water as a Quenching Cooling Medium, Appl. Sci. 2023, 13(10), 6021; <https://doi.org/10.3390/app13106021>, FI(2022): 2.838 (Q2)-autor corespondent **WOS:000994361800001**
2. Istrate, B., Munteanu, C., Antoniac, I.-V., Lupescu, Ș.-C., Current Research Studies of Mg-Ca-Zn Biodegradable Alloys Used as Orthopedic Implants—Review, Crystals, 2022, 12(10), 1468; <https://doi.org/10.3390/cryst12101468>, FI (2021): 2.688 (Q2) **WOS:000872374100001**
3. S. Lupescu, C. Munteanu, E.V. Sindilar, B. Istrate, I. Mihai, B. Oprisan, and A.S. Pasca, Long-Term Examination of Degradation and In Vivo Biocompatibility of Some Mg-0.5Ca-xY Alloys in Sprague Dawley Rats, MATERIALS, 2022, 15(17), 5958; <https://doi.org/10.3390/ma15175958> **WOS:000851880000001**
4. B. Istrate, C. Munteanu, S. Lupescu, R. Chelariu, M.D. Vlad, P. Vizureanu, MATERIALS, Vol. 13, Is. 14, Article Number: 3082, 2020, DOI: 10.3390/ma13143082, **WOS:000554140300001**, FI (2020): 3.653 (Q1) - autor corespondent
5. S Lupescu, C Munteanu, B Istrate, K Earar, The Influence of Zr on Microstructure, Mechanical Properties and Corrosion Resistance in Mg-Y-Zr Biodegradable Alloys, REV.CHIM.(Bucharest), Vol. 69, No. 12, pp. 3382-3385, 2018, **WOS:000458533800010**, FI(2019): 1.755
6. S Lupescu, B Istrate, C Munteanu, M G Minciuna, S Focsaneanu, K Earar, Characterization of Some Master Mg-X System (Ca, Mn, Zr, Y) Alloys Used in Medical Applications, REV.CHIM.(Bucharest) Vol. 68 No. 6 pp. 1408-1413, 2017, **WOS:000408702900034**, FI(2019): 1
7. Burduhos Nergis D.D.; Vizureanu P., Vizureanu P.; Lupescu S.; Burduhos Nergis D.P.; Perju M.C.; Sandu A.V., Microstructural Analysis of Ambient Cured Phosphate Based-Geopolymers with Coal-Ash as Precursor, Archives of Metallurgy and Materials Volume 67, Issue 2

*Lucrări publicate în volumele conferințelor*

### b) Volume indexate ISI:


8. **Lupescu S** ; Munteanu C; Istrate B; Luca D; Benchea M; Mahu G, Experimental, microstructural and tribological studies of the system Mg-2Ca-5Y, IOP Conference Series-Materials Science and Engineering, Volume: 444, Article Number: 032008, DOI:10.1088/1757-899X/444/3/032008, Published: 2018, **WOS:000467443600030**
9. **B Istrate, T Voloseniuc, C Munteanu and Ș Lupescu**, Topical Notions About in Vivo Analysis for Degradable Biomaterials with Utility in Human Body, IOP Conf. Series: Materials Science and Engineering 374 (2018) 012092 doi:10.1088/1757-899X/374/1/012092, **WOS:000446775900092**
10. **Istrate, B; Munteanu, C; Lupescu, S; Benchea, M; Vizureanu, P**, Preliminary Microstructural and Microscratch Results of Ni-Cr-Fe and Cr<sub>3</sub>C<sub>2</sub>-NiCr Coatings on Magnesium Substrate, IOP Conference Series-Materials Science and Engineering, Volume: 209, Article Number: 012024, DOI: 10.1088/1757-899X/209/1/012024, Published: 2017, **WOS:000423732100024**
11. **S Lupescu, C Munteanu, B Istrate, S Stanciu, N Cimpoesu, B Oprisan**, Microstructural Investigations on Alloy Mg-2Ca-0.2Mn-0.5Zr-1Y, IOP Publishing IOP Conf. Series: Materials Science and Engineering 209 (2017), 012018 doi:10.1088/1757-899X/209/1/012018, **WOS:000423732100018**

**c) Reviste incluse în BDI (INSPEC, ZMATH, SCOPUS etc.):**

12. Oprisan, D. Vasincu, **S. Lupescu**, C. Munteanu, B. Istrate, D. Popescu, C. Condratovici, A.R. Dimofte, K. Earar, Electrochemical analysis of some biodegradable Mg-Ca-Mn alloys, Revista de Chimie, Volume 70, Issue 12, 2019, Pages 4525-4530, DOI: 10.37358/RC.19.12.7788, autor corespondent
13. B Istrate, C Munteanu, **S Lupescu**, V-I Antoniac and E Sindilar, Structural Characterization of Mg-0.5Ca-xY Biodegradable Alloys, Key Engineering Materials, ISSN: 1662-9795, Vol. 782, pp 129-135, doi:10.4028/www.scientific.net/KEM.782.129
14. C Munteanu, **S Lupescu**, B Istrate, V-I Antoniac, M Benchea and A Savin, Some Tribological Aspects of Mg-0.5Ca-xY Biodegradable Materials, Key Engineering Materials, Vol. 782, pp 136-141, doi:10.4028/www.scientific.net/KEM.782.136
15. **S Lupescu**, C Munteanu, A Tufescu, B Istrate and N Basescu, Contact stress simulation problem in case of the Mg alloys, ACME 2020, IOP Conf. Series: Materials Science and Engineering 997 (2020) 012024, IOP Publishing, doi:10.1088/1757-899X/997/1/012024
16. **S Lupescu**, I C Manolache, C Suci, H Badarau-Suster, Desing and construction of a stand for checking the shape deviations of brake disc, TEHNOMUS jurnal no.30, 2023

*Lucrari publicate în domeniul conexe tezei de doctorat:*

**a) Reviste cotate ISI:**

17. Roman, T; Pui, A; Lukacs, AV ; Cimpoesu, N; Lupescu, S; Borhan, AI; Kordatos, K; Ntziouni, A; Postolache, P; Zaharia, M; Stanciu, S; Mitoseriu, L, Structural changes of cerium doped copper ferrites during sintering process and magneto-electrical properties **WOS:000482244200066** 

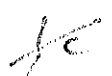
*Lucrări publicate în volumele conferințelor în domeniul conexe tezei de doctorat:*

**b) Volume indexate ISI:**

18. G Mahu, C Munteanu, B Istrate, M Benchea and **S Lupescu**, Influence of Al<sub>2</sub>O<sub>3</sub>-13TiO<sub>2</sub> powder on a C45 steel using atmospheric plasma spray process, IOP Conf. Series: Materials Science and Engineering 444 (2018) 032010 doi:10.1088/1757-899X/444/3/032010, **WOS:000467443600032**
19. Paulin C; Chicet D; Paleu V ; Benchea M; **Lupescu S**; Munteanu C, Dry friction aspects of Ni-based self-fluxing flame sprayed coatings, IOP Conference Series-Materials Science and Engineering, Volume: 227, Article Number: 012091, DOI: 10.1088/1757-899X/227/1/012091, Published: 2017, **WOS:000409221600091**
20. M PANȚURU, D CHICET, **Ș LUPESCU**, B ISTRATE, C MUNTEANU, APPLICATIONS OF CERAMIC COATINGS AS TBCs ON THE INTERNAL COMBUSTION ENGINE VALVES, ACTA TECHNICA NAPOCENSIS Series: Applied Mathematics, Mechanics, and Engineering , Vol. 61, Issue I, March, 2018 **WOS:000428903500022**
21. CC Epure, C Munteanu, B Istrate, **SC Lupescu**, M Harja, Replacement of natural sand with sand obtained from the recycling of crushed household glass, IOP Conference Series: Materials Science and Engineering 1262 (1), 012019.
22. FC Lupu, C Munteanu, B Istrate, **SC Lupescu**, R Ciubotaru, S Adrian, Structural analysis and mechanical properties of some coatings obtained by cold spray method. A review, IOP Conference Series: Materials Science and Engineering 1262 (1), 012023.

## 2. Carti sau capitole

C. Munteanu, B. Istrate, **S. Lupescu** Știința și Ingineria Materialelor, Ed. "Europlus", 222 pg., 2019, Galati, ISBN: 978-606-628-166-9:



### 3. Brevete de invenție

1. C. Munteanu, B. Istrate, S.C. Lupescu, A. Savin, E.V. Sindilar, Aliaje biodegradabile pe baza de magneziu-calciu cu adaos controlat de Ytriu (Mg-Ca-Y), Cerere de brevet de invenție înregistrată de OSIM cu nr. A-00748/15.11.2019

2. Istrate, C. Munteanu, A. Savin, E.V. Sindilar, S.C. Lupescu, Aliaje biodegradabile pe bază de magneziu-calciu cu adaos controlat de mangan, Cerere de brevet de invenție înregistrată de OSIM cu nr. A-100702/05.11.2020

### 4. Proiecte/ Contracte/ Granturi de cercetare-dezvoltare câștigate prin competiție națională sau încheiate cu institute de cercetare, companii, regii, societăți comerciale

Asistent cercetare - Proiect Component 1 (ORTOMAG) - Proiect Complex „OBTINEREA ȘI EXPERTIZAREA UNOR NOI MATERIALE BIOCOMPATIBILE PENTRU APLICAȚII MEDICALE”, Contract Nr. 60PCCDI/2018, PN-III-P1-1.2-PCCDI-2017-0239, 2018-2021, Director – Prof.dr.ing. Munteanu Corneliu

Asistent cercetare -”Cercetări științifice și aplicații practice pentru prototipurile C.En în domeniul stocării hidrogenului în materiale din sticlă” – Contract Nr. 7294/05.04.2019 –agent economic, 2019-2020, Director – Prof.dr.ing. Munteanu Corneliu

Asistent cercetare - Contract tip ROSE SGU-N, nr. AG-206/2019, etapa 2019-2020, Director – Sef.lucr. dr.ing. Iulian Agape

Asistent de cercetare - în cadrul proiectului „Materiale metalice biodegradabile inovative din sistemul Mg-Ca-Zn utilizate în aplicații ortopedice”, contract tip PN III RU\_TE 27/2022, Director- Conf.dr.ing. Bogdan Istrate

### 5 .Teza de doctorat

Titlul tezei: *CERCETĂRI ASUPRA UNOR BIOMATERIALE METALICE BIODEGRADABILE PE BAZĂ DE MAGNEZIU UTILIZATE ÎN APLICAȚII MEDICALE*

Domeniul: Ingineria Materialelor

Coordonator: prof. univ. acad. dr. ing. Corneliu MUNTEANU (*membru corespondent al Academiei Române*), Facultatea de Mecanică, Universitatea „Gheorghe Asachi” din Iași