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L I S T A

lucrărilor științifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

A1. "CERCETĂRI ASUPRA UNOR BIOMATERIALE METALICE BIODEGRADABILE PE BAZĂ DE MAGNEZIU UTILIZATE ÎN APLICATII MEDICALE". Îndrumători științifici: Prof. univ. acad. dr. ing. Corneliu MUNTEANU, Octombrie 2021.

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

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

C. Lucrări indexate ISI/BDI publicate în ultimii 5 ani

1. Huțanu, MG; Andrușcă, L.; Benchea, M.; Bernevig, M.-A.; Achiței, DC; Lupescu, Ș.-C.; Bădărău, G.; Cimpoeșu, N. Influența gradului de deformare al încărcărilor combinate asupra proprietăților structurale și mecanice ale oțelurilor inoxidabile. *J. Manuf. Mater. Process.* 2025, 9, 45. <https://doi.org/10.3390/jmmp9020045>,
2. Cimpoeșu, N.; Paleu, V.; Panaghie, C.; Roman, A.-M.; Cazac, AM; Cioca, L.-I.; Bejinariu, C.; Lupescu, SC; Axinte, M.; Popa, M.; et al. Proprietăți mecanice și rezistență la uzură a aliajului biodegradabil de ZnMgY. *Metale* 2024, 14, 836. <https://doi.org/10.3390/met14070836>
3. Carmen Nejneru, Ramona Cimpoeșu, 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)
4. 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)
5. 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> (registering DOI), FI (2021): 3.748 (Q1)
6. 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
7. 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
8. 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): 1.755
9. 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, Pages 595 - 600 2022

Lucrări publicate în volumele conferințelor

b) Volume indexate ISI:

1. 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
2. B Istrate, T Voloseniuc, C Munteanu and Ş 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
3. Istrate, B; Munteanu, C; Lupescu, S; Benchea, M; Vizureanu, P, Preliminary Microstructural and Microscratch Results of Ni-Cr-Fe and Cr₃C₂-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
4. 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.):

1. 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
2. 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
3. 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
4. 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
5. 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.
6. Nicolae Ciobanu, Iurie Ţurcanu, Sili Anotolie, Lupescu Ştefan Constantin, IMPLEMENTATION OF THE ZONAL URBAN PLAN IN URBAN DEVELOPMENT AND REGULATION,TEHNOMUS . 2024, p. 87-92. 6p.
7. D Nicolae, B Alexandru, LŞ Constantin, DETERMINATION OF THE QUALITATIVE CHARACTERISTICS OF COFFEE GROUNDS FOR ENERGY PURPOSES: A CASE STUDY FOR 100% ROBUSTA COFFEE, TEHNOMUS . 2024, p. 23-27. 5p.
8. B Eduard, LŞ Constantin, THE INFLUENCE OF SOME BIOFUEL OPERATING PROPERTIES, TEHNOMUS, 2024
9. N Ciobanu, I Ţurcanu, LŞ Constantin, ANALYSIS OF BUILDINGS WITH REDUCED ENERGY CONSUMPTION, TEHNOMUS, 2024

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a) Reviste cotate ISI:

1. 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 assessment, CERAMICS INTERNATIONAL, Volume:45, Issue:14, Pages:17243-17251, DOI:10.1016/j.ceramint.2019.05.280,OCT2019, WOS:000482244200066, FI(2019): 4.527(Q1)

Lucrări publicate în volumele conferințelor

b) Volume indexate ISI:

1. G Mahu, C Munteanu, B Istrate, M Benchea and S Lupescu, Influence of Al₂O₃-13TiO₂ 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
2. 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
3. M PANȚURU, D CHICET, Ş 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
4. 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.

5. 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.

D. Lucrări publicate în ultimii 5 ani în reviste și volume de conferințe cu referenți (neindexate)

- Reviste

Nu este cazul

- Selecție cu maximum 20 lucrări în volume de conferințe

1. 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
2. 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.
3. Nicolae Ciobanu, Iurie Țurcanu, Sili Anotlie, Lupescu Ștefan Constantin, IMPLEMENTATION OF THE ZONAL URBAN PLAN IN URBAN DEVELOPMENT AND REGULATION, TEHNOMUS . 2024, p. 87-92. 6p.
4. D Nicolae, B Alexandru, LȘ Constantin, DETERMINATION OF THE QUALITATIVE CHARACTERISTICS OF COFFEE GROUNDS FOR ENERGY PURPOSES: A CASE STUDY FOR 100% ROBUSTA COFFEE, TEHNOMUS . 2024, p. 23-27. 5p.
5. B Eduard, LȘ Constantin, THE INFLUENCE OF SOME BIOFUEL OPERATING PROPERTIES, TEHNOMUS, 2024
6. N Ciobanu, I Țurcanu, LȘ Constantin, ANALYSIS OF BUILDINGS WITH REDUCED ENERGY CONSUMPTION, TEHNOMUS, 2024
7. Development of a test stand for verifying the wear of friction materials in automobile brake pads, Lupescu Ștefan Constantin, Severin Traian, Tămășag Ioan, Ștefan cel Mare University of Suceava, Romania, International Conference on Biomaterials & Regenerative Medicine BioREMEDI'2025, on October 16-18, 2025.
8. Review of Orthopedic Implants based on Mg-Ca-Zn, Lupescu Ștefan Constantin, Cerlincă Delia Aurora, Tamașag Ioan, Ștefan cel Mare University of Suceava, Romania, International Conference on Biomaterials & Regenerative Medicine BioREMEDI'2025, on October 16-18, 2025.

E. Brevete obținute în întreaga activitate

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

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19.10.2025

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