

MEMORIU ȘTIINȚIFIC

Drd. Radu Sorin Nartîță

Studii de doctorat

Perioada: 10.2020 – 12.2025

Conducător științific: Prof. Dr. Ioana Demetrescu

Domeniu: Chimie

Titlul tezei de doctorat: *ABORDĂRI INTEGRATE DE INVESTIGARE A MULTIFUNCȚIONALITĂȚII ALIAJULUI MULTICOMPONENT Ti-20Zr-5Ta-2Ag*

Activitate științifică

A. Lista de lucrări științifice (articole în reviste sau volume)

1. Nartîță, R.; Golgovici, F.; Demetrescu, I. „NADES-Mediated Deposition of Potential Biomimetic Drug-Loaded Polypyrrole on Biomedical Ti₂₀Zr₅Ta₂Ag”, *Biomimetics*, 10, 568, 2025. DOI: [10.3390/biomimetics10090568]. IF – 3.9, Q1; AIS – 0.600, Q1.
2. Nartîță, R.; Stoian, A.B.; Ioniță, D.; Demetrescu, I. „Thermal effects on the mechanical, electrochemical, and surface properties of a Ti₂₀Zr₅Ta₂Ag alloy for potential industrial and biomedical applications”, *Journal of Materials Research and Technology*, 35, 7215–7234, 2025. DOI: [10.1016/j.jmrt.2025.02.240]. IF – 6.6, Q1; AIS – 0.980, Q1.
3. Stoian, A.B.; Prodana, M.; Nartîță, R.; Ioniță, D.; Simoiu, M. „Antibacterial Properties and Long-Term Corrosion Resistance of Bioactive Coatings Obtained by Matrix-Assisted Pulsed Laser Evaporation on TiZrTaAg”, *Metals (Basel)*, 15, 253, 2025. DOI: [10.3390/met15030253]. IF – 2.5, Q2; AIS – 0.435, Q2.
4. Nartîță, R.; Ioniță, D.; Demetrescu, I. „The performance of high-entropy alloys in aggressive environments”, *Annals of the Academy of Romanian Scientists, Series on Physics and Chemistry*, 9, 26–40, 2024. DOI: [10.56082/annalsarsciphyschem.2024.2.26].
5. Nartîță, R.; Ioniță, D.; Demetrescu, I. „A Modern Approach to HEAs: From Structure to Properties and Potential Applications”, *Crystals*, 14, 451, 2024. DOI: [10.3390/cryst14050451]. IF – 2.4, Q2; AIS – 0.394, Q2.
6. Demetrescu, I.; Nartîță, R.; Andrei, M.; Didilescu, A.C.; Cimpean, A.; Ioniță, D. „Technological Aspects and Performance of High Entropy Alloys with Potential Application in Dental Restorations and Reducing Implant Failure”, *Applied Sciences*, 13, 12000, 2023. DOI: [10.3390/app132112000]. IF – 2.5, Q1; AIS – 0.428, Q2.
7. Stoian, A.B.; Nartîță, R.; Totea, G.; Ioniță, D.; Burnei, C. „Complex Bioactive Chitosan–Bioglass Coatings on a New Advanced TiTaZrAg Medium–High-Entropy Alloy”, *Coatings*, 13, 971, 2023. DOI: [10.3390/coatings13050971]. IF – 2.9, Q2; AIS – 0.418, Q3.
8. Golgovici, F.; Tudose, A.E.; Diniasi, D.; Nartîță, R.; Fulger, M.; Demetrescu, I. „Aspects of Applied Chemistry Related to Future Goals of Safety and Efficiency in Materials Development for Nuclear Energy”, *Molecules*, 28, 874, 2023. DOI: [10.3390/molecules28020874]. IF – 4.2, Q2; AIS – 0.677, Q2.
9. Nartîță, R.; Andrei, M.; Ioniță, D.; Didilescu, A.C.; Demetrescu, I. „Can Graphene Oxide Help to Prevent Peri-Implantitis in the Case of Metallic Implants?”, *Coatings*, 12, 1202, 2022. DOI: [10.3390/coatings12081202]. IF – 3.4, Q2; AIS – 0.439, Q3.

IOSUD-UNSTPB

Școala Doctorală Inginerie Chimică și Biotehnologii

10. Nartiță, R.; Ioniță, D.; Demetrescu, I.; Enăchescu, M. „A fresh perspective on medium entropy alloys applications as coating and coating substrate”, Annals of the Academy of Romanian Scientists, Series on Physics and Chemistry, 7, 34–46, 2022. DOI: [10.56082/annalsarsciphyschem.2022.2.34].
11. Nartiță, R.; Ioniță, D. „Influence of Albumin on the corrosion behavior of Ti50Zr alloy”, U.P.B. Scientific Bulletin, Series B, 84, 2022.
12. Nartiță, R.; Ioniță, D.; Demetrescu, I. „Sustainable Coatings on Metallic Alloys as a Nowadays Challenge”, Sustainability, 13, 10217, 2021. DOI: [10.3390/su131810217]. IF – 3.9, Q2; AIS – 0.516, Q3.
13. Nartiță, R.; Ioniță, D.; Demetrescu, I.; Enăchescu, M. „Selecting a surface preparation treatment on a medium entropy Ti-Zr-Ta-Ag alloy”, Annals of the Academy of Romanian Scientists, Series on Physics and Chemistry, 6, 23–31, 2021. DOI: [10.56082/annalsarsciphyschem.2021.2.23].
14. Nartiță, R.; Ioniță, D.; Demetrescu, I. „A combined scientometric and critical approach in reviewing TiZr implant alloys and coating performances”, Coatings, 11, 392, 2021. DOI: [10.3390/coatings11040392]. IF – 3.2, Q2; AIS – 0.410, Q2.

B. Participări la conferințe/workshop-uri

1. Nartiță, R.; Golgovici, F.; Ioniță, D.; Demetrescu, I. Improvement of new potential biomaterials and their characterization using techniques such as microscopy, spectroscopy, electrochemistry, chromatography etc., NanoBioMat Conference, Winter Edition 2024.
2. Nartiță, R.; Stoian, A.B.; Ioniță, D.; Demetrescu, I. The influence of temperature on the structure and properties of TiZrTaAg high entropy alloy, NanoBioMat Conference, Summer Edition 2024.
3. Nartiță, R.; Golgovici, F.; Demetrescu, I. Aspects of electrodeposition from NADES electrolytes, NanoBioMat Conference, Winter Edition 2023.
4. Nartiță, R.; Andrei, M.; Didilescu, A.C.; Ioniță, D.; Demetrescu, I. A combined approach in understanding the potential use of high entropy alloys (HEAs) in dentistry, NanoBioMat Conference, Summer Edition 2023.
5. Nartiță, R.; Fulger, M.; Demetrescu, I. Can high entropy alloys be used as structural nuclear materials for future nuclear applications?, NanoBioMat Conference, Winter Edition 2022.
6. Nartiță, R.; Andrei, M.; Didilescu, A.C.; Ioniță, D.; Demetrescu, I. Composite coatings with graphene oxide for dental and orthopedic implants, NanoBioMat Conference, Summer Edition 2022.
7. Nartiță, R.; Ioniță, D.; Demetrescu, I. Effect of surface preparation treatments on a TiZrTaAg alloy surface, NanoBioMat Conference, Winter Edition 2021.
8. Nartiță, R.; Ioniță, D.; Enăchescu, M.; Demetrescu, I. The influence of proteins on metallic biomaterials, NanoBioMat Conference, Summer Edition 2021.
9. Nartiță, R.; Ioniță, D.; Prodana, M.; Demetrescu, I. Aspecte analitice ale spectrometriei de masă cu plasmă cuplată inductiv, NanoBioMat Conference, Winter Edition 2020.
10. Nartiță, R.; Demetrescu, I. Raport asupra perspectivelor în identificarea și managementul unor condiții medicale, NanoBioMat Conference, Summer Edition 2020.

Student-doctorand

Radu Sorin Nartiță

