

Universitatea POLITEHNICA București  
 Facultatea Chimie Aplicata si Stiinta Materialelor  
 Departamentul Chimie Generala  
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## L I S T A

### lucrărilor științifice în domeniul disciplinelor din postul didactic

#### A. Teza de doctorat

**A1. Procedee fizico-chimice in testarea si exploatarea unor aliaje dentare-sustinuta in 2009, titlu de doctor in chimie din 2010.**

#### B. Cărți si capitole în cărți publicate în ultimii 10 anii

**B1.** Florentina Golgovici, **Mariana Prodana**, Daniela Ionita, “Metode avansate de caracterizare a biomaterialelor”, Ed. Printech, 2011, ISBN 978-606-521-692-1.

**B2.** A. Marinoiu, G. Mihai, O. Lazar, S. Rosoiu, **M. Prodana**, C. Sisu, M. Raceanu, M. Enachescu, Facile preparation of graphene-supported platinum-cobalt nanoparticles and their use as electrocatalyst in pem fuel cells, in “The 28th volume of the Micro- and Nanoengineering (MNE) Series” published by the Romanian Academy entitled NANOMATERIALS –FUNCTIONAL PROPERTIES AND APPLICATIONS, EDITURA ACADEMIEI ROMÂNE, pg. 9-39, București, 2020, ISBN 978-973-27-3290-8

#### C. Lucrări indexate ISI/BDI

a) în reviste de specialitate de circulație internațională recunoscute cotate ISI sau indexate în baze de date internaționale specifice domeniului, care fac un proces de selecție a revistelor pe baza unor criterii de performanta (Ris); b) în alte reviste de specialitate de circulație internațională (Rio); c) în reviste din țară recunoscute C.N.C.S.I.S. (Rns); d) în alte reviste de specialitate de circulație națională (Rno); b,c,d-inclusiv indexate în baze de date internaționale recunoscute.

Obs. – Grupe distincte, în ordinea de mai sus.

**(Ris)1.** Stoian, AB (Stoian, Andrei Bogdan); Prodana, M (Prodana, Mariana); Nartita, R (Nartita, Radu); Ionita, D (Ionita, Daniela); Simoiu, M (Simoiu, Madalina), Antibacterial Properties and Long-Term Corrosion Resistance of Bioactive Coatings Obtained by Matrix-Assisted Pulsed Laser Evaporation on TiZrTaAg, METALS, Volume15, Issue3, DOI10.3390/met15030253, Article Number 253, Published FEB 27 2025, Indexed 2025-04-02, WOS:001452766500001, FI<sub>2024</sub>=2.5

**(Ris)2.** Pirvu, C (Pirvu, Cristian); Prodana, M (Prodana, Mariana); Dumitriu, C (Dumitriu, Cristina); Gheboianu, AG (Gheboianu, Alexandru-George); Pandele, AM (Pandele, Andreea Madalina); Enachescu, M (Enachescu, Marius); Vasile, GG (Vasile, Gabriela-Geanina); Buica, GO (Buica, George-Octavian), Heavy Metal Ion Detection Using TiO<sub>2</sub> Nanotubes and Self-Reduced TiO<sub>2</sub>

Nanotube Electrodes, APPLIED SCIENCES-BASEL, Volume 14, Issue 24, DOI 10.3390/app142411879, Article Number 11879, Published DEC 2024, Indexed 2025-01-03, WOS:001385545400001, FI<sub>2024</sub>=2.5

**(Ris)3.** Prodana, M (Prodana, Mariana); Stoian, AB (Stoian, Andrei Bogdan); Ionita, D (Ionita, Daniela); Brajnicov, S (Brajnicov, Simona); Boerasu, I (Boerasu, Iulian); Enachescu, M (Enachescu, Marius); Burnei, C (Burnei, Cristian), In-Depth Characterization of Two Bioactive Coatings Obtained Using MAPLE on TiTaZrAg, MATERIALS, Volume 17, Issue 12, DOI 10.3390/ma17122989, Article Number 2989, Published JUN 2024, WOS:001256703600001, FI<sub>2024</sub>=3.2

**(Ris)4.** Enache, LB (Enache, Laura-Bianca); State, S (State, Sabrina); Mihai, G (Mihai, Geanina); Prodana, M (Prodana, Mariana); Messina, AA (Messina, Angelo Alberto); Enachescu, M (Enachescu, Marius), Fabrication of Co-Sb Junction Nanowires by Galvanostatic Electrodeposition, LANGMUIR, Volume 40, Issue 15, Page 7947-7961, DOI 10.1021/acs.langmuir.3c03835, Published APR 5 2024, Indexed 2024-04-16, WOS:001200633700001, FI<sub>2024</sub>=3.9

**(Ris)5.** Radu, RD (Radu (Dusman), Ramona-Daniela); Voicu, ME (Voicu, Manuela Elena); Prodana, M (Prodana, Mariana); Demetrescu, I (Demetrescu, Ioana); Anuta, V (Anuta, Valentina); Draganescu, D (Draganescu, Doina), Electrospun PCL Wires Loaded with Vancomycin on Zirconium Substrate, MATERIALS, Volume 16, Issue 22, DOI 10.3390/ma16227237, Article Number 7237, Published NOV 2023, Indexed 2023-12-17, WOS:001118290400001, FI<sub>2024</sub>=3.2

**(Ris)6.** Voicu Manuela Elena; Golgovici Florentina; Prodana Mariana; Draganescu Doina; Demetrescu Ioana, Advanced Procedure of Simultaneous Electrodeposition from a Natural Deep Eutectic Solvent of a Drug and a Polymer Used to Improve TiZr Alloy Behavior, Materials, Volume 16, Issue 12, DOI 10.3390/ma16124387, Published JUN 2023, Indexed 2023-07-09, WOS:001017534100001, FI<sub>2024</sub>=3.2

**(Ris)7.** Lazar, OA (Lazar, Oana Andreea); Nikolov, AS (Nikolov, Anastas Savov); Moise, CC (Moise, Calin Constantin); Mihai, GV (Mihai, Geanina Valentina); Prodana, M (Prodana, Mariana); Enachescu, M (Enachescu, Marius), KrF excimer laser for Pt-NPs synthesis by PLAL in isopropanol solution and their use in a SERS application, JOURNAL OF MATERIALS RESEARCH AND TECHNOLOGY-JMR&T, Volume 24, Page 7135-7152, DOI 10.1016/j.jmrt.2023.04.268, Published MAY-JUN 2023, Indexed 2023-08-20, WOS: 001043357300001, FI<sub>2024</sub>=6.6

**(Ris)8.** Prodana, M (Prodana, Mariana); Ionita, D (Ionita, Daniela); Stoian, AB (Stoian, Andrei Bogdan); Demetrescu, I (Demetrescu, Ioana); Mihai, GV (Mihai, Geanina Valentina); Enachescu, M (Enachescu, Marius), The Design and Characterization of New Chitosan, Bioglass and ZnO-Based Coatings on Ti-Zr-Ta-Ag, Coatings, Volume 13, Issue 3, DOI 10.3390/coatings13030493, Published MAR 2023, Indexed 2023-04-14, WOS:000958513800001, FI<sub>2024</sub>=2.8

**(Ris)9.** Lazar, OA (Lazar, Oana Andreea); Nikolov, AS (Nikolov, Anastas Savov); Moise, CC (Moise, Calin Constantin); Rosoiu, S (Rosoiu, Sabrina); Prodana, M (Prodana, Mariana); Enachescu, M (Enachescu, Marius), Fabrication of Pt nanoparticles by nanosecond pulsed laser ablation in aqueous solution of ethanol using KrF excimer laser, APPLIED SURFACE SCIENCE, Volume 609, DOI 10.1016/j.apsusc.2022.155289, Published JAN 30 2023, Indexed 2022-11-24, WOS:000882160100002, FI<sub>2024</sub>=6.9

**(Ris)10.** State, S (State (Rosoiu), Sabrina); Enache, LB (Enache, Laura-Bianca); Potorac, P (Potorac, Pavel); Prodana, M (Prodana, Mariana); Enachescu, M (Enachescu, Marius), Synthesis of Copper Nanostructures for Non-Enzymatic Glucose Sensors via Direct-Current Magnetron Sputtering, *Nanomaterials*, Volume 12, Issue 23, DOI 10.3390/nano12234144, Published DEC 2022, 2022-12-24, WOS:000896108200001, FI<sub>2024</sub>= 4.3

**(Ris)11.** Golgovici, F (Golgovici, Florentina); Ionascu, FG (Ionascu, Florentina Gina); Prodana, M (Prodana, Mariana); Demetrescu, I (Demetrescu, Ioana), Simultaneously Embedding Indomethacin and Electrodeposition of Polypyrrole on Various CoCr Alloys from Ionic Liquids, *Materials*, Volume 15, Issue 13, DOI 10.3390/ma15134714, Published JUL 2022, Indexed 2022-07-21, WOS:000825596800001, FI<sub>2024</sub>=3.2

**(Ris)12.** Lacatusu, I (Lacatusu, Ioana); Balanuca, B (Balanuca, Brindusa); Serafim, A (Serafim, Andrada); Ott, C (Ott, Cristina); Prodana, M (Prodana, Mariana); Badea, N (Badea, Nicoleta), Salicin and Hederacoside C-Based Extracts and UV-Absorbers Co-Loaded into Bioactive Lipid Nanocarriers with Promoted Skin Antiaging and Hydrating Efficacy, *Nanomaterials*, Volume 12, issue 14, Article Number 2362, DOI 10.3390/nano12142362, Published JUL 2022, Indexed 2022-08-04, WOS:000831780700001, FI<sub>2024</sub>=4.3

**(Ris)13.** Boulanger, N (Boulanger, Nicolas); Kuzenkova, AS (Kuzenkova, Anastasiia S.); Iakunkov, A (Iakunkov, Artem); Nordenstrom, A (Nordenstrom, Andreas); Romanchuk, AY (Romanchuk, Anna Yu); Trigub, AL (Trigub, Alexander L.); Zasimov, PV (Zasimov, Pavel, V); Prodana, M (Prodana, Mariana); Enachescu, M (Enachescu, Marius); Bauters, S (Bauters, Stephen); Amidani, L (Amidani, Lucia); Kvashnina, KO (Kvashnina, Kristina O.); Kalmykov, SN (Kalmykov, Stepan N.); Talyzin, AV (Talyzin, Alexandr, V), High Surface Area "3D Graphene Oxide" for Enhanced Sorption of Radionuclides, *ADVANCED MATERIALS INTERFACES*, Volume 9, Issue 18, Article Number 2200510, DOI 10.1002/admi.202200510, Published JUN 2022, Indexed 2022-05-29, ISSN 2196-7350, WOS:000797817600001, FI<sub>2024</sub>=4.4

**(Ris)14.** Badea, MA (Badea, Madalina Andreea); Balas, M (Balas, Mihaela); Prodana, M (Prodana, Mariana); Cojocaru, FG (Cojocaru, Florentina Gina); Ionita, D (Ionita, Daniela); Dinischiotu, A (Dinischiotu, Anca), Carboxyl-Functionalized Carbon Nanotubes Loaded with Cisplatin Promote the Inhibition of PI3K/Akt Pathway and Suppress the Migration of Breast Cancer Cells, *Pharmaceutics*, Volume 14, Issue 2, Article Number 469, DOI 10.3390/pharmaceutics14020469, Published FEB 2022, Indexed 2022-03-13, WOS:000765142800001, FI<sub>2024</sub>=5.5

**(Ris)15.** Ionascu, FG (Ionascu, Florentina Gina); Prodana, M (Prodana, Mariana); Golgovici, F (Golgovici, Florentina); Demetrescu, I (Demetrescu, Ioana), A Combined Strategy to Improve the Performance of Dental Alloys Using a New CoCrNbMoZr Alloy with Mn and Si Coated via an Anodic Oxidation Procedure, *METALS*, Volume 11, Issue 7, Article Number 1017, DOI 10.3390/met11071017, Published JUL 2021, WOS:000676238700001, FI<sub>2024</sub>=2.5

**(Ris)16.** Prodana, M (Prodana, Mariana); Stoian, AB (Stoian, Andrei Bogdan); Burnei, C (Burnei, Cristian); Ionita, D (Ionita, Daniela), Innovative Coatings of Metallic Alloys Used as Bioactive Surfaces in Implantology: A Review, *COATINGS*, Volume 11, Issue 6, Article Number 649, DOI 10.3390/coatings11060649, Published JUN 2021, Indexed 2021-07-03, WOS:000666708200001, FI<sub>2024</sub>= 2.8

**(Ris)17.** Golgovici, F (Golgovici, Florentina); Prodana, M (Prodana, Mariana); Ionascu, FG (Ionascu, Florentina Gina); Demetrescu, I (Demetrescu, Ioana), A Comparative Electrochemical and Morphological Investigation on the Behavior of NiCr and CoCr Dental Alloys at Various

Temperatures, METALS, Volume11, Issue 2, Article Number 256, DOI10.3390/met11020256, Published FEB 2021, Indexed 2021-03-18, WOS:000622787800001, FI<sub>2024</sub>=2.5

**(Ris)18.** Cocarta, DM (Cocarta, Diana Mariana); Prodana, M (Prodana, Mariana) ; Demetrescu, I (Demetrescu, Ioana); Lungu, PEM (Lungu, Patricia Elena Maria); Didilescu, AC (Didilescu, Andreea Cristiana), Indoor Air Pollution with Fine Particles and Implications for Workers' Health in Dental Offices: A Brief Review, SUSTAINABILITY, Volume 13, Issue 2, Article Number 599, DOI10.3390/su13020599, Published JAN 2021, Indexed 2021-02-10, WOS:000611766700001, FI<sub>2024</sub>=3.3

**(Ris)19.** George-Razvan Pandelea-Dobrovicescu, **Mariana Prodana**, Florentina Golgovici, Daniela Ionita, Maria Sajin and Ioana Demetrescu, Surface Morphology and Histopathological Aspects of Metallic Used Cardiovascular CoCr Stents, Metals **2020**, 10, 1112-1125; doi:10.3390/met10091112, WOS: 000580557200001, FI<sub>2024</sub>=2.5

**(Ris)20.** **Prodana, Mariana**, Nistor, Claudiu-Eduard, Stoian, Andrei Bogdan, Ionita, Daniela, Burnei, Cristian, Dual Nanofibrous Bioactive Coatings on TiZr Implants, COATINGS, Volume: 10, Issue: 6, 2020, DOI: 10.3390/coatings10060526, WOS:000553904000001, FI<sub>2024</sub>=2.8

**(Ris)21.** Iakunkov, Artem, Skrypnychuk, Vasyi, Nordenstrom, Andreas, Shilayeva, Elizaveta, Korobov, Mikhail, **Prodana, Mariana**, Enachescu, Marius, Larsson, Sylvia, Talyzin, Alexandr, Activated graphene as a material for supercapacitor electrodes: effects of surface area, pore size distribution and hydrophilicity, PHYSICAL CHEMISTRY CHEMICAL PHYSICS, Volume:21, Issue:32, Pages:17901-17912, DOI:10.1039/c9cp03327k, 2019, WOS:000481777100040, FI<sub>2024</sub>=2.9

**(Ris)22.** Prioteasa, L (Prioteasa, Larisa); **Prodana, M (Prodana, Mariana)**; Demetrescu, I (Demetrescu, Ioana); Ionita, D (Ionita, Daniela) ; Maier, T (Maier, Traian); Moisa, M (Moisa, Marcel), Heavy metals and other trace elements in the blood and breast milk from two different romanian areas, ENVIRONMENTAL ENGINEERING AND MANAGEMENT JOURNAL, Volume: 17 Issue: 12 Pages: 2915-2921, Published: DEC 2018, ISSN: 1582-9596, WOS:000456043800016, FI<sub>2024</sub>=0.9

**(Ris)23.** Badea, MA (Badea, Madalina Andreea); **Prodana, M (Prodana, Mariana)**; Dinischiotu, A (Dinischiotu, Anca); Crihana, C (Crihana, Carmen); Ionita, D (Ionita, Daniela); Balas, M (Balas, Mihaela), Cisplatin Loaded Multiwalled Carbon Nanotubes Induce Resistance in Triple Negative Breast Cancer Cells, PHARMACEUTICS, Volume: 10, Issue: 4, Article Number: 228, DOI: 10.3390/pharmaceutics10040228, Published: DEC 2018, ISSN: 1999-4923, WOS:000455853800066, FI<sub>2024</sub>=5.5

**(Ris)24.** **Ionita, D** (Ionita, Daniela); **Ungureanu, C** (Ungureanu, Camelia); **Prodana, M (Prodana, Mariana)** ; **Negru, AM** (Negru, Andrada Maria); **Enachescu, M** (Enachescu, Marius), Hybrid Materials Based on Multi-walled Carbon Nanotubes with Antimicrobial Properties, REVISTA DE CHIMIE, Volume: 69 Issue: 10, Pages: 2625-2632, Published: OCT 2018, ISSN: 0034-7752, WOS:000451925300006, FI<sub>2019</sub>=1.755

**(Ris)26.** **Tihan, GT** (Tihan, Gratiela Teodora); **Zgarian, RG** (Zgarian, Roxana Gabriela); **Berteanu, E** (Berteanu, Elena); **Ionita, D** (Ionita, Daniela); **Totea, G** (Totea, Georgeta); **Iordachel, C** (Iordachel, Catalin); **Tatia, R** (Tatia, Rodica); **Prodana, M (Prodana, Mariana)**; **Demetrescu, I** (Demetrescu, Ioana), Alkaline Phosphatase Immobilization on New Chitosan Membranes with Mg<sup>2+</sup> for Biomedical Applications, MARINE DRUGS, Volume: 16 Issue: 8, Article Number: 287, DOI: 10.3390/md16080287, Published: AUG 2018, ISSN: 1660-3397, WOS:000442868200014, FI<sub>2024</sub>=5.4

**(Ris)27.** Ionita, D (Ionita, Daniela), Necula, L (Necula, Luiza, **Prodana, M** (Prodana, Mariana), Totea, G (Totea, Georgeta), Demetrescu, I (Demetrescu, Ioana), Corrosion of an Active Antibacterial Nanostructured Coating on Titanium, REVISTA DE CHIMIE, Volume: 69 Issue: 5 Pages: 1115-1121, Published: MAY 2018, ISSN: 0034-7752, WOS:000434954100016, FI<sub>2019</sub>=1.755

**(Ris)28.** Stoian, AB (Stoian, Andrei Bogdan, Vardaki, M (Vardaki, Maria), Ionita, D (Ionita, Daniela), Enachescu, M (Enachescu, Marius), **Prodana, M** (Prodana, Mariana), Brancoveanu, O (Brancoveanu, Oana), Demetrescu, I (Demetrescu, Ioana), Nanopores and nanotubes ceramic oxides elaborated on

titanium alloy with zirconium by changing anodization potentials, CERAMICS INTERNATIONAL, Volume: 44 Issue: 6 Pages: 7026-7033, DOI: 10.1016/j.ceramint.2018.01.137, Published: APR 2018, ISSN: 0272-8842, WOS:000427215100164, FI<sub>2024</sub>=5.6

**(Ris)29.** Buica, G.-O.; Lazar, I.G.; Birzan, L ; Lete, C; **Prodana, M**; Enachescu, M; Tecuceanu, V; Stoian, AB; Ungureanu, E.-M., Azulene-ethylenediaminetetraacetic acid: A versatile molecule for colorimetric and electrochemical sensors for metal ions, Electrochimica Acta 263, 2018, 382-390, DOI:10.1016/j.electacta.2018.01.059, WOS:000424643900045, ISSN:0013-4686], FI<sub>2024</sub>=5.6

**(Ris)30.** Sun, JH (Sun, Jinhua), Klechikov, A (Klechikov, Alexey), Moise, C (Moise, Calin), **Prodana, M** (Prodana, Mariana), Enachescu, M (Enachescu, Marius), Talyzin, AV (Talyzin, Alexandr V.), A Molecular Pillar Approach To Grow Vertical Covalent Organic Framework Nanosheets on Graphene: Hybrid Materials for Energy Storage, ANGEWANDTE CHEMIE-INTERNATIONAL EDITION, Volume: 57 Issue: 4 Pages: 1034-1038, DOI: 10.1002/anie.201710502, Published: JAN 22 2018, ISSN: 1433-7851, WOS:000428208700030, FI<sub>2024</sub>=16.9

**(Ris)31.** Laikhtman, A., Makrinich, G. Sezen, M., Yildizhan, M.M., Martinez, J.I., Dinescu, D., **Prodana, M.**, Enachescu, M., Alonso, J.A., Zak, A., Hydrogen Chemical Configuration and Thermal Stability in Tungsten Disulfide Nanoparticles Exposed to Hydrogen Plasma, JOURNAL OF PHYSICAL CHEMISTRY C, ISSN: 1932-7447, Volume: 121, Issue 21, Pages: 11747-11756 DOI: 10.1021/acs.jpcc.7b00074, Published: JUN 1 2017, WOS:000402775200084, FI<sub>2024</sub>=3.2

**(Ris)32.** Monaico, E.V., Tiginyanu, I.M., Ursaki, V.V., Nielsch, K., Balan, D., Prodana, M., Enachescu, M., Gold Electroplating as a Tool for Assessing the Conductivity of InP Nanostructures Fabricated by Anodic Etching of Crystalline Substrates, JOURNAL OF THE ELECTROCHEMICAL SOCIETY, ISSN: 0013-4651, Volume: 164, Issue 4, Pages: D179-D183, DOI: 10.1149/2.1071704jes, Published: 2017, WOS:000400958600098, FI<sub>2024</sub>=3.3

**(Ris)33.** C. Vasilescu, P. Osiceanu, J.M.C. Calderon Moreno, S.I. Drob, S. Preda, M. Popa, I. Dan, M. Marcu, **M. Prodana**, I.A. Popovici, D. Ionita, E. Vasilescu, Microstructure, surface characterization and long-term stability of new quaternary Ti-Zr-Ta-Ag alloy for implant use, MATERIALS SCIENCE & ENGINEERING C-MATERIALS FOR BIOLOGICAL APPLICATIONS, ISSN 0928-4931, Volume: 71, Pages: 322-334, DOI: 10.1016/j.msec.2016.10.004, Published: FEB 1 2017, WOS:000390967200039, FI<sub>2024</sub>=8.1

**(Ris)34.** C. Vasilescu, S.I. Drob, P. Osiceanu, J.M.C. Calderon Moreno, **M. Prodana**, D. Ionita, I. Demetrescu, M. Marcu, I. A. Popovici, E. Vasilescu, Microstructure, Surface Characterization, and Electrochemical Behavior of New Ti-Zr-Ta-Ag Alloy in Simulated Human Electrolyte, METALLURGICAL AND MATERIALS TRANSACTIONS A-PHYSICAL METALLURGY AND MATERIALS SCIENCE, ISSN 1073-5623, Volume: 48A, Issue: 1, Pages: 513-523, DOI: 10.1007/s11661-016-3774-2, Published: JAN 2017, WOS:000391492200047, FI<sub>2024</sub>=2.5

**(Ris)35.** M. Balas, S. Constanda, A. Duma-Voiculescu, **M. Prodana**, A. Hermenean, S. Pop, I. Demetrescu, A. Dinischiotu, Fabrication and toxicity characterization of a hybrid material based on oxidized and aminated MWCNT loaded with carboplatin, TOXICOLOGY IN VITRO, ISSN 0887-2333, Volume: 37, Pages: 189-200, DOI: 10.1016/j.tiv.2016.09.011, Published: DEC 2016, WOS:000387198300022, FI<sub>2024</sub>=2.7

**(Ris)36.** F. Golgovici, G.R.P. Dobrovicescu, **M. Prodana**, Electrochemical Characterization of Co-Cr Alloys Used as Stents in Cardiovascular Applications, REVISTA DE CHIMIE, ISSN 0034-7752, Volume: 67, Issue: 11, Pages: 2217-2224, Published: NOV 2016, WOS:000388361900019, FI<sub>2019</sub>=1.755

**(Ris)37.** **M. Prodana**, A.B. Stoian, A.M. Negru, F. Golgovici, D. Bojin, M. Enachescu, Characterization of Electrodeposited CoSb Nanowires Used as Anode Materials in Batteries, REVISTA DE CHIMIE, ISSN 0034-7752, Volume: 67, Issue: 10, Pages: 2071-2074, Published: OCT 2016, WOS: 000388359900037, FI<sub>2019</sub>=1.755

**(Ris)38.** L. Prioteasa, **M. Prodana**, M. Buzoianu, ICP-MS Determination of Some Metals and Metalloids Concentrations in Soil from Agricultural and Inhabited Areas of Romania, REVISTA DE CHIMIE, ISSN 0034-7752, Volume: 67, Issue: 7, Pages: 1314-1317, Published: JUL 2016, WOS: 000385513000016, FI<sub>2019</sub>=1.755

**(Ris)39.** Ionita Daniela, Georgescu Daniela Bajenaru, **Prodana Mariana**, Electrochemical and Antibacterial Properties of an Electrodeposited Hydroxiapatite Bionic Film on Titanium, REVISTA DE CHIMIE, ISSN 0034-7752, Volume: 67, Issue: 2, Pages: 297-301, Published: FEB 2016, WOS:000372170700020, FI<sub>2019</sub>=1.755

**(Ris)40.** **Prodana Mariana**, Duta Marius, Ionita Daniela, Bojin Dionezie, Stan Miruna, Dinischiotu Anca, Demetrescu Ioana, A new complex ceramic coating with carbon nanotubes, hydroxyapatite and TiO<sub>2</sub> nanotubes on Ti surface for biomedical applications, CERAMICS INTERNATIONAL, ISSN 0272-8842, Volume: 41, Issue: 5, Pages: 6318-6325, Part: A, Published: JUN 2015, DOI: 10.1016/j.ceramint.2015.01.060, WOS:000353176300025, FI<sub>2024</sub>=5.6

**(Ris)41.** Romonti Daniela Covaciu, Voicu Georgeta, **Prodana Mariana**, Electrochemical Behavior of Coated and Uncoated Nonprecious CoCr and NiCr Alloys in Artificial and Natural Saliva, INTERNATIONAL JOURNAL OF ELECTROCHEMICAL SCIENCE, ISSN 1452-3981, Volume: 10, Issue: 9, Pages: 6935-6945, Published: SEP 2015, WOS:000365101700006, FI<sub>2024</sub>=2.4

**(Ris)42.** **Prodana Mariana**, Duma (Voiculet) Adriana, Constanda Sabrina, Balas Mihaela, Dinischiotu Anca, Demetrescu Ioana, In vitro Assessment of Functionalized Multiwalled Carbon Nanotubes with Oxaliplatin on Human Cancerous Cells, MATERIALE PLASTICE, ISSN 0025-5289 Volume: 52, Issue: 4, Pages: 457-463, Published: DEC 2015, WOS:000368971900008, FI<sub>2024</sub>=0.7

**(Ris)43.** Golgovici Florentina, **Prodana Mariana**, Popescu Anca, Effect of Reprocessing Treatment on the Corrosion of Co–Cr Alloy in Acid Media, REVISTA DE CHIMIE, ISSN 0034-7752 Volume: 66, Issue: 5, Pages 660-667, Published: MAY 2015, WOS:000355126000014, FI<sub>2019</sub>=1.755

**(Ris)44.** **Prodana Mariana**, Ionita Daniela, Bojin Dionezie, Demetrescu Ioana, Comparing three different composites carbon nanotubes/HA on titanium alloys substrate, FULLERENES, NANOTUBES AND CARBON NANOSTRUCTURES, ISSN 1536-383X, Volume: 23, Issue: 7, Pages 573-582, Published: 2015, DOI:10.1080/1536383X.2013.874344, WOS: 000342292400001, FI<sub>2024</sub>=1.8

**(Ris)45.** **Prodana Mariana**, Voiculet Adriana, Garea Sorina, Radu Mihaela, Iovu Horia, Demetrescu Ioana, Dinischiotu Anca, Synthesis, characterization and controlled toxicity of a novel hybrid material based on cisplatin and docetaxel, CENTRAL EUROPEAN JOURNAL OF CHEMISTRY, ISSN: 1895-1066, Volume: 12, Issue: 10, Pages 1008-1015, Published: OCT 2014, DOI: 10.2478/s11532-014-0536-0, WOS: 000336308200003, FI<sub>2016</sub>=1.46

**(Ris)46.** Ciobotaru C. C., Damian C. M., Polosan S., **Prodana Mariana**, Iovu Horia, Drug delivery study of single-wall carbon nanotubes covalent functionalized with cisplatin, DIGEST JOURNAL OF NANOMATERIALS AND BIOSTRUCTURES, ISSN 1842 – 3582, Volume : 9, Issue : 2, pages 859 – 868, Published: APR-JUN 2014, WOS : 000339050700041, FI<sub>2024</sub>=1.3

**(Ris)47.** Prioteasa Larisa, **Prodana Mariana**, Buzoianu Mirela, Demetrescu Ioana, Determination by ICP-MS of heavy metals and other toxic elements in drinking water from several rural areas of Romania, REVISTA DE CHIMIE, ISSN 0034-7752, Volume 65, Issue 8, pages. 925-928, 2014, Published: AUG 2014, WOS : 000340867000013, FI<sub>2019</sub>=1.755

**(Ris)48.** **Prodana Mariana**, Voiculet Adriana, Bojin Dionezie, Ionita Daniela, Nanocomposites based on carbon nanotubes functionalized with drug molecules, REVISTA DE CHIMIE, ISSN 0034-7752, Volume 64, Issue 8, pages. 844-847, Published: AUG 2013, WOS : 000330329400011, FI<sub>2019</sub>=1.755

**(Ris)49.** **Prodana Mariana**, Ionita Daniela, Ungureanu Camelia, Bojin Dionezie, Demetrescu Ioana, Enhancing antibacterial effects of multiwalled carbon nanotubes using silver particle, DIGEST JOURNAL OF NANOMATERIALS AND BIOSTRUCTURES, ISSN 1842 – 3582, Volume 6, Issue 2, pages 549 – 556, Published APR-JUN 2011, WOS : 000290789400023, FI<sub>2024</sub>=1.3

**(Ris)50.** Vasilescu Cora, Drob Paula, Vasilescu Ecaterina, Demetrescu Ioana, Ionita Daniela, **Prodana Mariana**, Drob Silviu Iulia, Characterisation and corrosion resistance of the electrodeposited hydroxyapatite and bovine serum albumin/hydroxyapatite films on Ti-6Al-4V-1Zr alloy surface, CORROSION SCIENCE, ISSN 0010-938X, Volume 53, Issue 3, Pages 992–999, Published MAR 2011, WOS : 000287338400017, FI<sub>2024</sub>=8.5

**(Ris)51.** Ionita Daniela, **Prodana Mariana**, Demetrescu Ioana, Stanciu S. George, Stanciu G. A., Electrochemical stability and surface analysis in evaluation fluoride effect on new bioalloy Ti7Al3V2Mo2Fe used in dentistry, MATERIALS AND CORROSION, ISSN (Print) 0947-5117 - ISSN (Online) 1521-4176, Volume 62, Issue 12, pages 1111-1116, Published DEC 2011, DOI: 10.1002/maco.201005661, WOS: 000298064000004, FI<sub>2024</sub>=2

**(Ris)52.** Ioniță Daniela, **Prodana Mariana**, Vasilescu Rodica, Drob Paula, BSA/HA coating on titanium alloy in order to activate direct bond formation at the implant surface, MOLECULAR CRYSTALS AND LIQUID CRYSTALS, ISSN 1542-1406, Volume 522: pages 157–161, Published 2010, WOS: 000278163300028, FI<sub>2024</sub>=0.7

**(Ris)53.** Demetrescu Ioana, Luca Rodica, Ioniță Daniela, **Prodana Mariana**, Evaluation of Heavy Metals of Temporary Teeth From Areas with Different Pollution Level, MOLECULAR CRYSTALS AND LIQUID CRYSTALS, ISSN 1542-1406, Volume 522: pages 233–241, Published 2010, WOS: 000278163400006, FI<sub>2024</sub>= 0.7

**(Ris)54.** **Prodana Mariana**, Murariu Alina, Meghea Aurelia, Demetrescu Ioana, Biomonitoring as assessment of human exposure to heavy metals. Speciation of Hg in fish food and impact on human health, MATERIALS RESEARCH INNOVATIONS, ISSN 1432-8917, Volume 13, Issue 3, pages 409-412, Published 2009, WOS: 000269573900079, FI<sub>2014</sub>=0.83

**(Ris)55.** **Prodana Mariana**, Bojin Dionezie, Ioniță Daniela, Popa Mihai, Vasilescu Ecaterina, Drob Paula, Biomimetic hybride ionorganic/organic coatings in the increasing of the integration capacity of

TiAlVZr bioalloy, MOLECULAR CRYSTALS AND LIQUID CRYSTALS, ISSN 1542-1406, Volume 486, pages 133-139, Published 2008, WOS: 000256186000013, FI<sub>2024</sub>= 0.7

**(Ris)56.** Popa Mihai V., Vasilescu Ecaterina, Drob Paula, Vasilescu Cora, **Prodana Mariana**, Effect of the Content on the Electrochemical Stability of Titanium Alloys with Vanadium or Zirconium, REVISTA DE CHIMIE, ISSN 0034-7752, Volume 59, Issue 6, pages 618-622, Published 2008, WOS: 000257604600003, FI<sub>2019</sub>=1.755

Lucrari indexate ISI in volumele unor conferinte internationale:

**(Ris)57.** Ioniță Daniela, Răducanu Doina, **Prodana Mariana**, Demetrescu Ioana, The manipulation of properties of Ti bioalloys at micro and nanoscale using etching procedures, KEY ENGINEERING MATERIALS, ISSN 1013-9826, Volume 396-398, pages 393-396, Published 2009, WOS: 000265306300093

**(Ris)58.** **Prodana Mariana**, Luca Rodica, Miculescu Florin, Bojin Dionezie, A new approach in evaluation surface properties of natural temporary teeth from high polluted area, KEY ENGINEERING MATERIALS, ISSN 1013-9826, Volume 415, pages 21-24, Published 2009, WOS: 000278916000006

**(Ris)59.** Ioniță Daniela, **Prodana Mariana**, Caposi Madalina, Modification of passive layer on TiNbZrTa alloy in simulated body fluid (SBF) at various pH, KEY ENGINEERING MATERIALS, ISSN 1013-9826, Volume 415, pages 17-20, Published 2009, WOS: 000278916000005

**(Ris)60.** Ioniță Daniela, Ciohodaru Lucia, **Prodana Mariana**, Demetrescu Ioana, Metallic Ion Release from Titanium Alloy and Stainless Steel Coated With Electrolytic Calcium Phosphate (HA), KEY ENGINEERING MATERIALS, ISSN 1013-9826, Volume 361-363, pages 729-732, Published 2008, WOS: 000253480200181

**(Ris)61.** Badea Nicoleta, Tite Teddy, **Prodana Mariana**, Câmpean Anisoara, Demetrescu Ioana, The Behavior of SiC Films Fabricated by Hybrid Laser- Magnetron Deposition after Immersion, KEY ENGINEERING MATERIALS, ISSN 1013-9826, Volume 330-332, pages 537-540, Published 2007, WOS: 000245026800132

**b) în alte reviste de specialitate de circulație internațională (Rio);**

**(Rio)1.** Prioteasa Larisa, **Prodana Mariana**, Buzoianu Mirela, Neagu Liliana, Physicochemical and Microbiological Analysis of Still And Carbonated Mineral Waters from Romania, PARIPEX - INDIAN JOURNAL OF RESEARCH, ISSN 2250 – 1991, Volume 4, Issue 4, pages 4-6, Published APR 2015.

**(Rio)2.** **Prodana Mariana**, Meghea Aurelia, Stanciu George, Hristu Radu, Demetrescu Ioana, Aspects of correlation between the surface analysis and heavy metal content in temporary teeth from areas with various pollution levels of Romania, International Journal of Environmental Science and Development (IJESD), ISSN 2010-0264, Volume 1. Pages 47-52, Published 2010.

**c) în reviste din țară recunoscute C.N.C.S.I.S.**

**(Rsn)1.** Lungu, PEM (Lungu, Patricia Elena Maria); Prodana, M (Prodana, Mariana), OUTDOOR PARTICLE MATTER INVESTIGATION BEFORE AND DURING COVID-19 PANDEMIC, UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN SERIES B-CHEMISTRY AND MATERIALS SCIENCE, Volume 83, Issue 4, Page121-130, Published 2021, Indexed 2021-12-30, ISSN1454-2331, WOS:000731356100011, FI<sub>2023</sub>=0.3

**(Rsn)2.** Mariana Prodana, Daniela Ionita, Madalina Simoiu, Mihai Andrei, Antimicrobial effect of gentamicin incorporated in hydroxiapatite coating on 316L stainless steel, Analele Universității din Oradea-Fascicula Chimie, Vol. XXVI(27), 2020, p. 13-20, , ISSN 1224-7626

**(Rsn)3.** Andrada Maria NEGRU, Mariana PRODANA, Matei Maxim POPESCU, Bianca Mihaela DIMITROV, Daniela IONITA, Nanostructured surfaces for implantology obtaining and characterization, Analele Universității din Oradea-Fascicula Chimie, Vol. XXVI(26), 2019, p. 5-12, ISSN 1224-7626

**(Rsn)4.** Funieru, E (Funieru, Elena), **Prodana, M** (Prodana, Mariana), Parlatescu, I (Parlatescu, Ioanina), Gheorghe, C (Gheorghe, Carmen), Funieru, C (Funieru, Cristian), Tovu, S (Tovu, Serban), ICP-MS IN EVALUATION OF HEAVY METAL CONTENT IN ORAL LICHENOID, UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN SERIES B-CHEMISTRY AND MATERIALS SCIENCE, Volume: 80 Issue: 2 Pages: 171-180, Published:2018, ISSN: 1454-2331, WOS:000434271500015

**(Rsn)5** Vardaki, M (Vardaki, Maria), **Prodana, M** (Prodana, Mariana), Stoian, AB (Stoian, Andrei Bogdan), Ionita, D (Ionita, Daniela), CORROSION AND BIOACTIVITY OF A BIOINSPIRED COATING ON TiZr ALLOYS, UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN SERIES B-CHEMISTRY AND MATERIALS SCIENCE, Volume: 80 Issue: 1 Pages: 209-218, Published:2018, ISSN: 1454-2331, WOS:000428112600017

**(Rsn)6.** Golgovici, F (Golgovici, Florentina), **Prodana, M** (Prodana, Mariana), Pandelea-Dobrovicescu, GR (Pandelea-Dobrovicescu, George-Razvan), ABOUT ELECTROCHEMICAL STABILITY OF A CoCr ALLOY USED AS STENTS MATERIAL IN MEDICINE, UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN SERIES B-CHEMISTRY AND MATERIALS SCIENCE, Volume: 80 Issue: 1 Pages: 219-230, Published:2018, ISSN: 1454-2331, WOS:000428112600018

**(Rsn)7.** Duta, M (Duta, Marius), Ionita, D (Ionita, Daniela), **Prodana, M** (Prodana, Mariana), PROTECTION EFFICIENCY OF A NEW COMPLEX HYBRID COATING ON Ti, HAVING TITANIA NANOTUBES, CARBON NANOTUBES AND HYDROXYAPATITE, UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN SERIES B-CHEMISTRY AND MATERIALS SCIENCE, Volume: 78 Issue: 4 Pages: 131-138, Published:2016, ISSN: 1454-2331, WOS:000417053700014

**(Rsn)8.** Prodana Mariana, Enachescu Marius, Ionita Daniela, Electrochemical and morphological characterization of anodized TiO<sub>2</sub> used for battery anodes, Analele Universității din Oradea-Fascicula Chimie, Volume XXIII, 2016, Pages 64-68

**(Rsn)9.** Ichim, Luiza, **Prodana Mariana**, Dumitriu Cristina, The elaboration and characterization of a hybrid bionic coating on ti based on hydroxyapatite and nanotubes, UPB Scientific Bulletin, Series B: Chemistry and Materials Science, ISSN 1454-2331, Volume 78, Issue 1, 2016, Pages 161-172

**(Rsn)10.** Romoņi Daniela, Voicu Georgeta, **Prodana Mariana**, Ionița Daniela, Nanosized electrodeposited phosphate masses on stainless steel, UPB Scientific Bulletin, Series B: Chemistry and Materials Science, ISSN 1454-2331, Volume 77, Issue 2, 2015, Pages 99-106, WOS:000417044700010

**(Rsn)11.** Bajenaru-Georgescu Daniela, Ionita Daniela, **Prodana Mariana**, Demetrescu Ioana, Electrochemical and antibacterial characterization of thermally treated titanium biomaterials, UPB Scientific Bulletin, Series B: Chemistry and Materials Science, ISSN 1454-2331, Volume 77, Issue 4, 2015, Pages 63-74, WOS:000417047800006

**(Rsn)12.** Prioteasa Larisa, **Prodana Mariana**, The evaluation of metals content in bio and non-bio yogurts by ICP-MS method and their variation with time, UPB Scientific Bulletin, Series B: Chemistry And Materials Science, ISSN 1454-2331, Volume 76, Issue 3, 2014, Pages 141-150

**(Rsn)13.** Voiculet Adriana, **Prodana Mariana**, Demetrescu Ioana, Cisplatin functionalization of multiwall carbon nanotubes UPB Scientific Bulletin, Series B: Chemistry And Materials Science, ISSN 1454-2331, Volume 76, Issue 1, 2014, Pages 48-59

**(Rsn)14.** Grecu Mihaela, **Prodana Mariana**, Cimpean Anisoara, Ionita Daniela, Enhancing The Performance Of Titanium Surface Via Elaboration Of A Nanostructure And A Bioactive Coating, UPB Scientific Bulletin, Series B: Chemistry and Materials Science, ISSN 1454-2331, Volume 74, Issue 2, 2012, pages 113-128

**(Rsn)15.** **Prodana Mariana**, Ionita Daniela, Bojin Dionezie, Demetrescu Ioana, Different methods to functionalization of multiwalled carbon nanotubes for hybrid nanoarchitectures-JOURNAL OF SUSTAINABLE ENERGY, ISSN 2067-5534, Volume 3, Issue 2, 2012, pages 62-66

**(Rsn)16.** Caposi Mădalina, **Prodana Mariana**, Ionita Daniela, Effect of temperature and pH on the metal release from TiNi, UPB Scientific Bulletin, Series B: Chemistry and Materials Science, ISSN 1454-2331, Volume 73, Issue 3, 2011, pages 27-35

**(Rsn)17.** **Prodana Mariana**, Bojin Dionezie, Ionița Daniela, Effect of hydroxyapatite in changing of interface properties alloy/biofluid. UPB Scientific Bulletin, Series B: Chemistry and Materials Science, ISSN 1454-2331, Volume 71, Issue 4, 2009, pages 89-98

**d) în alte reviste de specialitate de circulație națională (Rno); b,c,d-inclusiv indexate în baze de date internaționale recunoscute.**

**(Rno)1.** **Prodana Mariana**, Ionița Daniela, Demetrescu Ioana, Caracterizarea aliajului Ti7Al3V2Mo2Fe și a potențialului său de utilizare ca aliaj dentar. COROZIUNE ȘI PROTECȚIE ANTICOROZIVĂ, ISSN 1842-0346, Volume 1, 2007, pages 44-49

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

### - Reviste

a) internaționale recunoscute (cu ISSN sau ISBN) din țară și din străinătate (Vi) și b) naționale (Vn), inclusiv cotate ISI sau indexate în baze de date internaționale.

Obs. – Grupe distincte, în ordinea de mai sus.

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

**(Vi)1. Mariana Prodana**, Florentina Golgovici, Andrada Negru, Marius Enachescu, BIOMIMETIC CALCIUM PHOSPHATE COATING OF CoCr ALLOYS, The 40th ARA Congress Learning without frontiers Congress Proceedings, 2016: p. 113-117. ISBN: 978-1-4244-4715-2

**(Vi)2. Prodana Mariana**, Albu Madalina Georgiana, Kaya Durmus Alpaslan, Negru Andrada, Bojin Dionezie, Enachescu Marius, New method for encapsulation of oregano essential oil into carbon nanotubes, The 39th ARA Congress –Learning without frontiers Congress Proceedings, 2015: p. 88-92. ISBN: 978-1-4244-4715-2

**(Vi)3. Prodana Mariana**, Anicai Liana, Ionita Daniela, Stoian Andrei, Bojin Dionezie, Enachescu Marius, Electrochemical deposition of Co-Sb nanowire arrays into titania nanotubes, The 38th ARA Congress –Learning without frontiers Congress Proceedings, 2014: p.21-28

**(Vi)4.** Vidu Ruxandra, **Prodana Mariana**, Golgovici Florentina, Negru Andrada, Bojin Dionezie, Enachescu Marius, Fe-doped CoSb nanowires using electrochemical methods, The 37th ARA Congress –Learning without frontiers Congress Proceedings, 2013: p. 575-579

**(Vi)5. Prodana Mariana**, Ionita Daniela, Bojin Dionezie, Enachescu Marius, Deposition of carbon nanotubes on titanium substrate proceeding The 36th ARA Congress –Learning without frontiers, 2012: p. 230-234, ISBN: 978-2-553-01635-6

**(Vi)6. Prodana Mariana**, Meghea Aurelia, Stanciu George, Demetrescu Ioana, Confocal microscopy and wettability in describing behavior of temporary teeth from areas with various pollution levels Proceedings of 2010 International Conference of Biotechnology and Food Science, 2010, p.151-155, ISBN 987-1-84626-036-0, WOS:000289218200030

**(Vi)7. Prodana Mariana**, Capoși Madalina, Iordachescu Dana, Ions release from Ti Implant alloys in simulated bioliquids IFMBE Proceedings-14<sup>th</sup> Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, 2008, 20: p. 60-63, ISSN 1680-0737

**(Vi)8.** Manea Stefan, Luca Rodica, **Prodana Mariana**, European Cells and Materials, Volume 16, Issue SUPPL. 5., December 2008, Page 10, Open Access, Application of inductively coupled plasma-mass spectrometry to investigate the presence of trace metals in human tooth (Conference Paper)

### E. Brevete obținute în întreaga activitate

**B1. RO134196-A2**-Brevet de invenție cu titlul: **Preparing composition with antitumour effect by contacting carbon nanotubes with ethanol solution of medicaments premetexed and quercetin, centrifuging and filtering**, autorii: Ionita Mioara Daniela, **Prodana Mariana**, Badea Nicoleta, Dinischiotu Anca, Balas Mihaela

**B2. RO133427-A2**-Brevet de invenție cu titlul: **Procedeu electrochimic de obținere a anozilor porosi nanostructurați de aliaj SnNi din lichide ionice pe baza de clorura de colina, pentru bateriile cu intercalare ionică**, Nr. A/00726/26.09.2017, Nr 133427, autori: **Prodana Mariana**, Ionita Mioara Daniela, Pirvu Valeriu Cristian, Golgovici Florentina, Anicai Liana Jeanina, Petica Aurora, Enachescu Marian

**B3. RO132031-A2**-Brevet de invenție cu titlul: **Bioaliaj Ti-Zr-Ta-Ag pentru implanturi ortopedice**, Nr A/00056/26.01.2016, autori: Vasilescu Ecaterina-Valerica, Calderon Moreno Jose Maria, Vasilescu Cora, Drob Silviu Iulian, Stanciu Doina Ecaterina, Ionita Mioara Daniela, **Prodana Mariana**

**F. Proiecte de cercetare-dezvoltare-inovare: a) obținute prin competiție pe bază de contract/grant în țară / străinătate (Pn-naționale, Pi-internaționale); b) alte lucrări de cercetare-dezvoltare (F1, F2 etc.), după caz.**

Obs. – Grupe distincte, în ordinea de mai sus.

**Pn1.** CEEEX 11/2005 - Noi tipuri de materiale micro și nanostructurate pentru producții noi în construcții, bioinginerie și siguranța alimentară (2005-2008)- membru în echipa de cercetare

**Pn2.** CEEEX Modul I - Retea colaborativă pentru cercetarea efectelor poluanților din MEDIU asupra sănătății, în cadrul unor metasisteme complexe” (2006-2008)- membru în echipa de cercetare

**Pn3.** CEEEX Modul I: 139/2006 - Model de monitorizare a contaminării cu metale grele a alimentelor pe bază de pește și a riscului asupra sănătății consumatorului (2006-2008) - membru în echipa de cercetare

**Pn4.** CEEEX Modul IV-238/2006 - Dezvoltarea infrastructurii laboratorului acreditat al UPB-CNC pentru evaluarea rezistenței la coroziune a materialelor cu implicații în mediu&sănătate (2006-2008) - membru în echipa de cercetare

**Pn5.** CEEEX - 278/2006 - Compozite pe bază de polimeri ionici, utilizate ca suport biomimetic de țesut osos pentru testări in vitro (2006-2008)- membru în echipa de cercetare

**Pn6.** PN II: 41-005/2007 - Impactul factorilor de mediu în dinamica formării și comportamentului structurilor dinților temporari (2007-2010)- membru în echipa de cercetare

**Pn7.** PN II: 71-021/2007 - Noi biomateriale avansate, nanostructurate cu baza titan și elemente de aliere netoxice (2007-2010)- membru în echipa de cercetare

**Pn8.** CNCSIS TD 78/2007 - Procedee fizico-chimice în testarea și exploatarea unor aliaje dentare (2007-2009)-**director**

**Pn9.** CNCSIS-Idei-1712/2008-Studii exploratorii asupra mecanismului de formare și inducere de noi proprietăți unor electrozi modificați cu forme structurale (2009-2011), asistent de cercetare științifică.

**Pn10.** Proiecte complexe de cercetare exploratorie CNCSIS cod CNCSIS 248 - Proiect IDEI - Noi concepte și strategii pentru dezvoltarea cunoașterii unor noi structuri biocompatibile în bioinginerie (2010-2013)-membru în echipa de cercetare.

- Pn11.** Programul de studii postdoctorale pentru cercetare avansata in domeniul nanomaterialelor “NANOMAT”, POSDRU/89/1.5/S/54785, Cercetator postdoctoral, 01.05.2010- 01.03.2013
- Pn12.** PN II Parteneriate in domenii prioritare, nr. 166/12.07.2012 - Sinteza de noi biomateriale pentru industria poliesterilor cu aplicabilitate in industria de echipamente de protectie balistica, GREENBALEQUIP, Cercetator, 12.07.2012- 12.07.2016
- Pn13.** PN II/CAPACITĂȚI Modulul III – Cooperări Bilaterale/ UEFSCDI, nr. 686/22.04.2013 - O noua generatie de celule solare organice bazate pe nanotuburi de carbon, Cercetator, 16.04.2013- 10.12.2014
- Pn14.** PN II Parteneriate in domenii prioritare, nr. 66/2014 - O nouă baterie pe bază de lichide ionice și anod nanostructurat – BATIOLNAN, **Director de proiect**, 01.07.2014- 30.12.2017
- Pn15.** M-ERA NET, nr. 7-081/2013 - High performance nanostructured coatings using ionic liquids based on choline chloride – NANOCOATIL, Cercetator, 01.01.2014- 31.12.2015
- Pn16.** POSCCE O.2.2.1/MEN, nr. 630/11.03.2014 ID: 1960, COD SMIS 48650 Extinderea si modernizarea infrastructurii de cercetare dedicata nanotehnologiilor: sinteza de nanomateriale avansate, caracterizarea si producerea de nano-dispozitive – NANODIS, Cercetator, 11.03.2014- 11.11.2015
- Pn17.** ENIAC/UEFSCDI, nr. ENIAC 04/2014- THIN but Grate silicon 2 Designe Objects- Things2DO, Cercetator, 14.11.2014- 14.11.2017
- Pn18.** Proiect PN II-Îmbunătățirea sănătății orale și sistemice folosind lucrări dentare din aliaje modificate ORALSIS, nr. 130/2014, 2014-2017
- Pn19.** Cercetator științific gradul II în proiectul “Linie pilot de 300mm pentru dispozitive Smart Power si Power Discretas - R3-PowerUP” cu număr de înregistrare electronică SMIS 115833, contract de finantare nr. 1/1.1.3H/31.01.2018
- Pn20.** Cercetator științific gradul II în proiectul „Prima Linie Pilot Europeana pentru Carbura de Siliciu (SiC) de 200 mm dedicate electronicii dispozitivelor de putere – REACTION” cu număr de înregistrare electronică SMIS 121169, contract de finantare nr. 4/1.1.3H/24.04.2019
- Pn21.** Cercetator științific gradul II în proiectul “Metrologie avansata pentru industria digitalizata 4.0 de componente si sisteme electronice – MADEin4”, cu număr de înregistrare electronică SMIS 128826, contract de finantare nr. 8/1.1.3H/06.01.2020
- Pn22.** Cercetator științific gradul II în proiectul “Dezvoltarea condusului autonom al vehiculelor terestre si aeriene în Europa utilizand tehnologia FDSOI cu nod electronic de 12nm – OCEAN12”, cu număr de înregistrare electronică SMIS 129948, contract de finantare nr. 9/1.1.3H/20.01.2020
- Pn23.** Cercetator științific gradul II în proiectul “Linie pilot pentru circuite integrate semiconductoare cu noduri electronice de 3nm – Pin3S”, cu număr de înregistrare electronică SMIS 135127, contract de finantare nr. 10/1.1.3H/03.04.2020

**Pn24.** Cercetator stiintific gradul II în proiectul „Tehnologie pentru circuite integrate cu nod electronic de 2 nm - IT2”, cu număr de înregistrare electronică SMIS 136697, contract de finantare nr. 11/1.1.3H/06.07.2020

**Pn25.** Cercetator stiintific gradul II în proiectul „Realizarea unui lanț European de producție pentru RFSOI permițând dezvoltarea de noi domenii ca RF de senzorică, comunicare și 5G - BEYOND5”, cu număr de înregistrare electronică SMIS 1368777, contract de finantare nr. 12/1.1.3H/31.07.2020

**Pn26.** Director de grant internațional bilateral Moldova-Romania (Tehnologii de fabricare și aplicații ale nanoparticulelor și a nanoarhitecturilor bi- și tri-dimensionale pe baza de semiconductori de tip III-V, acronim TEHNONANOSENS), UEFISCDI, 2016-2018 (Partener român: Universitatea „Politehnica” din București – Centrul pentru Știința Suprafetei și NanoTehnologie (UPB-CSSNT); Partener străin: Institutul de Inginerie Electronică și Nanotehnologii ”D.Ghițu” al AȘM (IEN) din Chisinau, Republica Moldova

#### **E. Creații artistice prezentate la manifestări recunoscute:**

(a) Conferințe internaționale fără publicarea *in extenso* (rezumat/poster)

**Ei1. Mariana Prodana**, Marius Enachescu, Moise Calin-Constantin, Iulian Boerasu, Daniela Ionita, Characterization of Coatings Based on Chitosan, Bioactive Glass, Titanium Dioxide and Zinc Oxide Nanoparticles Prepared by Matrix Assisted Pulsed Laser Evaporation, 23rd Romanian International Conference on Chemistry and Chemical Engineering Constanța - Mamaia, ROMANIA - September 4 – 7, 2024.

**Ei2. Mariana Prodana**, Marian Enachescu, Moise Calin-Constantin, George Avram, Andrei Bogdan Stoian, Daniela Ionita, Nanocoatings prepared by MAPLE deposition based on chitosan (Ch), Bioactive glass (BG), titanium dioxide (TiO<sub>2</sub>) and zinc oxide nanoparticles (ZnO), 9th Nanotech. and Nanomaterials Research Conference (Nano Rome-2023), June 12- June 14, 2023, Rome, Italy.

**Ei3. Mariana Prodana**, Marius Enachescu, Andrei Bogdan Stoian, Mihaela Balas, Madalina-Andreea Badea, Anca Dinischiotu, Camelia Gavan, FUNCTIONALIZATION OF CARBON NANOTUBES WITH DRUGS IN ORDER TO INCREASE THE BIOCOMPATIBILITY, Carbon 2018, The World Conference on Carbon, July 1<sup>st</sup> -7<sup>th</sup>, Madrid, Spain

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**Data:**

27.09.2025

**Semnătura:**

