

LISTA LUCRARILOR ELABORATE

I. TEZA DE DOCTORAT (T)

T1. Contributii in domeniul biomaterialelor metalice utilizate la executia componentelor femurale ale endoprotezelor totale de sold; 2007

Conducator stiintific: Prof.dr.ing. Cosmeleata Georgeta;

Prof.dr.ing. Daniel Bunea

II. CARTI PUBLICATE (C)

Ca – Carti / cursuri (manuale) pentru uzul studentilor, publicate in edituri recunoscute.

Ca1. Antoniac I; Laptoiu D; Blajan AI; Cotrut C; *Instrumentar si dispozitive chirurgicale* (203 pag.), Editura Printech, Bucuresti, 2011, ISBN 978-606-521-665-5.

Ca2. Dobrescu M; **Antoniac V;** *Stiinta biomaterialelor* (130 pag.), Editura Printech, Bucuresti, 2003, ISBN 973-652-740-9.

Ca3. Purghele F; Badea R; **Antoniac I;** *Notiuni de medicina pentru ingineri* (171 pag.), Editura Printech, Bucuresti, 2001, ISBN 973-652-358-6.

Cb - Carti de specialitate publicate in edituri recunoscute (autor, coautor, editor).

Cb1. Antoniac I; Requena G; *Materials and Technologies for Advanced Engineering Research*, Trans Tech Publications, Switzerland, 165 pagini, 2024.

Cb2. Trus C; Obreja CD; Ghisman V; Buruiana DL; **Antoniac IV;** *Instrumentar si dispozitive chirurgicale*, Galati University Press, Cod CNCIS 281, 209 pagini, 2023.

Cb3. Grosu E; Antoniac A; **Antoniac I;** Deleanu IM; Robu A; *Materiale utilizate in medicina – aspecte interdisciplinare, Capitol: Perspective in sistemele terapeutice transdermice*, Editura Printech, Bucuresti, COD CNCIS 54, 2021, pp. 1-39, ISBN 978-606-23-1306-7.

Cb4. Moldovan H; **Antoniac VI;** Rădulescu B; Gheorghită D; *Tehnici și dispozitive medicale în chirurgia valvei aortice*, Editura Printech, Cod CNCIS 54, 147 pagini, 2020, ISBN: 978-606-23-1052-3.

Cb5. Antoniac I; editor, *Bioceramics and Biocomposites: From Research to Clinical Practice*, Edit. John Wiley & Sons, Inc., 400 pag., 2019, ISBN: 9781119049340.

Cb6. Niculescu M; Viscopoleanu G; Sarbu A; **Antoniac IV;** *Tehnica cimentarii in artroplastia totala de sold*, Editura Universitara Carol Davila Bucuresti, 152 pag., 2017, ISBN: 978-973-708-753-9.

Cb7. Antoniac I; editor, *BiomMedD VII*, Vol. 752, Trans Tech Publications, 150 pag., 2017, ISBN: 978-3-0357-1153-0.

Cb8. Antoniac I; Cirstoiu C; editor, *Orthopedic Biomaterials - From Materials Science to Clinical Applications*, Vol. 745, Trans Tech Publication, 178 pag., 2017, ISBN: 978-3-03835-565-6.

Cb9. Cavalu S; **Antoniac I;** Voicu SI; editor, *Biomaterials and Regenerative Biomedicine*, Vol. 695, Trans Tech Publications, 334 pag., 2016, ISBN: 978-3-03835-567-0.

Cb10. Antoniac I; editor, *Handbook of Bioceramics and Biocomposites*, Vol. 1-2, Springer International Publishing, 1386 pag., 2016, ISBN: 978-3-319-12459-9 (Print) 978-3-319-12460-5 (Online).

Cb11. Branzei M; **Antoniac I;** editor, *Materials Research and Application*, Vol. 875-877, Trans Tech Publications, 2400 pag., 2015, ISBN: 978-3-03835-498-7.

Cb12. Antoniac I; Albu M; Sinescu C; Miculescu M; editor, *BiomMedD2014*, Vol. 638, Trans Tech Publications, 394 pag., 2015, ISBN: 978-3-03835-432-1.

Cb13. Antoniac I; Cotrut C; Antoniac A; editor, *BiomMedD V*, Vol. 583, Trans Tech Publications, 200 pag., 2014, ISBN: 978-3-03785-866-0.

Cb14. Cavalu S; **Antoniac I;** Traistaru T; editor, *BIOCERAMICS 25*, Vol. 587, Trans Tech Publications, 474 pag., 2014, ISBN: 13 978-3-03785-899-8.

Cb15. Antoniac I; editor; *Biologically responsive biomaterials for tissue engineering, Series: Springer Series in Biomaterials Science and Engineering*, Vol. 1, Ed. Springer, 254 pag., 2013, ISBN 978-1-4614-4327-8, ISBN 978-1-4614-4328-5 (eBook).

Cb16. Antoniac I; *Biomateriale metalice utilizate la executia componentelor endoprotezelor totale de sold*, Editura Printech, Bucuresti, 254 pag., 2007, ISBN 978-973-718-881-6.

Cb17. Ciuca S; **Antoniac I;** Molagic C; Trante O; *Biomateriaux*, Editura Printech, Bucuresti, 189 pag., 2001, ISBN 973-652-358-X.

Cb18. Bunea D; Raducanu D; Ciuca I; Nocivin A; **Antoniac V;** *Implant materials*, Editura Printech, Bucuresti, 143 pag., 1999, ISBN 973-9475-85-X.

III. ALTE MATERIALE PUBLICATE (I,D)

I - Culegeri si Indrumare publicate.

I1. Antoniac I; Miculescu F; Laptoiu D; Miculescu M; *Biomateriale: Culegere de probleme*, Editura Printech, Bucuresti, 112 pag., 2007, ISBN 978-973-718-880-9.

I2. Bunea D; Antoniac V; Pencea I; Trante O; Dragulin D; Gherghisor G; Paunescu R; *Stiinta materialelor, Culegere de probleme*, Editura Printech, Bucuresti, 141 pag., 1999, ISBN 973-9475-44-2.

D - Alte lucrari publicate: capitole publicate in volume colective, capitole teoretice redactate, etc.

D1. Miculescu F; Mocanu AC; Stan GE; Maidanuc A; Miculescu M; Voicu S.I; **Antoniac IV;** *Bioceramics and Biocomposites: From Research to Clinical Practice, Chapter: Bioceramics Derived from Marble and Sea Shells as Potential Bone Substitution Materials*, Edit. John Wiley & Sons, Inc., Pag. 87-122, 2019.

D2. Lupescu O; **Antoniac I;** *Bioceramics and Biocomposites: From Research to Clinical Practice, Chapter: Bone Substitutes in Orthopedic and Trauma Surgery*, Edit. John Wiley & Sons, Inc., Pages 341-366, 2019.

D3. Hua Ai; Anderson J; Anseth K, **Antoniac I** et. al in *Definitions of Biomaterials for the Twenty-First Century*, Chapter: Attendees at Chengdu Definitions in Biomaterials Conference,

D4. Ivanov D; **Antoniac V;** *Smart Materials: Integrated Design, Engineering Approaches, and Potential Applications, Chapter: Biomimetic and Smart Biomaterials for Orthopedic Applications: More than the Sum of their Components*, Editor Anca Filimon, Apple Academic Press, Pag. 356-386, 2018, ISBN 9781771886871 - CAT# K345522.

D5. Antoniac I; Laptoiu D; Tecu C; Milea C; Gradinaru S; *Osteochondral Tissue Engineering Nanotechnology, Scaffolding-Related Developments and Translation, Chapter: Synthetic Materials for Osteochondral Tissue Engineering*, Ed. Springer International Publishing, Part of the Advances in Experimental Medicine and Biology book series (AEMB, volume 1058), Pag. 31-52, 2018.

D6. Antoniac IV; Totan N; Dragomir L; Antoniac A; *Cercetarea in Medicina dentara - proprietati optice ale dintilor si materialelor dentare, Chapter: Aplicatii ale microscopiei de forta atomica in caracterizarea biomaterialelor si tesuturilor dentare*; Publisher: Colorama Cluj-Napoca, Aprilie 2017.

D7. Antoniac IV; Miculescu F; Laptoiu D; Antoniac A; Niculescu M; Grecu D; *Handbook of Bioceramics and Biocomposites, Chapter: Retrieval analysis of hip prostheses*, Springer International Publishing, Pag. 901-933, 2016.

D8. Vladescu A; Surmeneva MA; Cotrut CM; Surmenev RA; **Antoniac IV;** *Handbook of Bioceramics and Biocomposites, Chapter: Bioceramic coatings for metallic implants*, Springer International Publishing, Pag. 703-733, 2016.

D9. Antoniac IV; Albu MG; Antoniac A; Rusu LC; Ghica MV; *Handbook of Bioceramics and Biocomposites, Chapter: Collagen-bioceramic smart composites*, Springer International Publishing, Pag. 301-324, 2016.

D10. Mohan D; Mohan A; **Antoniac IV;** Ciurea AV; *Handbook of Bioceramics and Biocomposites, Chapter: Current implants used in cranioplasty*, Springer International Publishing, Pag. 1275-1307, 2016.

D11. Niculescu M; Solomon BL; Viscopoleanu G; **Antoniac IV;** *Handbook of Bioceramics and Biocomposites, Chapter: Evolution of cementation techniques and bone cements in hip arthroplasty*, Springer International Publishing, Pag. 859-899, 2016.

D12. Marinescu R; **Antoniac IV;** *Handbook of Bioceramics and Biocomposites, Chapter: Clinical limitations of the biodegradable implants used in arthroscopy*, Springer International Publishing, Pag. 935-965, 2016.

D13. Weshler M; **Antoniac IV;** *Handbook of Bioceramics and Biocomposites, Chapter: Guided bone regeneration for dental implants*, Springer International Publishing, Pag. 1029-1073, 2016.

D14. Petreus T; **Antoniac I;** Sirbu P; Cotrutz CE; *Biologically responsive biomaterials for tissue engineering, Chapter: Molecular scissors: From biomaterials implant to tissue remodeling*, Springer International Publishing, Pag. 17-42, 2013.

D15. Antoniac I; Laptoiu D; Popescu D; Cotrut C; Parpala R; *Biologically responsive biomaterials for tissue engineering, Chapter: Development of bioabsorbable interference screws: How biomaterials composition, clinical and retrieval studies influence the innovative screw design and manufacturing processes*, Springer International Publishing, Pag. 107-136, 2013.

D16. Rusen E; Mocanu A; Marculescu B; Andronesu C; Stancu IC; Ioncea A; **Antoniac I;** *Photonic crystals: fabrication, band structure and applications, Chapter: Influence of the solid-liquid adhesion on the self-assembling properties of colloidal particles*, Nova Science Publishers, Inc., Pag. 173-189, 2010.

D17. Antoniac V; Neculescu A; Cosmeleata G; *Tratat de Stiinta si Ingineria Materialelor*, volum 3, Capitol 25. *Materiale biocompatibile si aliaje cu memoria formei*, Editura AGIR, Pag. 1463-1495, 2009.

D18. Antoniac V; *Advanced Materials, Chapter: Biocompatibility and biofunctionality*, Editura Orizonturi Universitare, Timisoara, Pag. 37-56, 2002.

IV. ARTICOLE / STUDII IN EXTENSO PUBLICATE (R, V)

Ris - Reviste de specialitate de circulatie internationala recunoscute (cotate / indexate ISI Thomson Reuters).

Ris1. Ghiban B; Antoniac A; Bordeasu I; **Antoniac I;** Petre G; Rau JV; Bordeasu D; Micu LM; *Biodegradability and Cavitation Erosion Behavior of Some Zinc Alloys from the System ZnCuMg*, METALS, Volume 15, Issue 2, 2025.

DOI10.3390/met15020161

Accession Number WOS:001430347000001

Ris2. Robu A; Kaya MGA; Antoniac A; Kaya DA; Coman AE; Marin MM; Ciocoiu R; Constantinescu RR; **Antoniac I**; *The Influence of Basil and Cinnamon Essential Oils on Bioactive Sponge Composites of Collagen Reinforced with Hydroxyapatite*, MATERIALS, Volume 18, Issue 3, 2025.

DOI10.3390/ma18030626

WOS:001418621100001

Ris3. Oprea M; Pandele AM; Nechifor AC; Nicoara AI; **Antoniac IV**; Semenescu A; Voicu SI; Enachescu CI; Fratila AM; *Improved Biomineralization Using Cellulose Acetate/Magnetic Nanoparticles Composite Membranes*, POLYMERS, Volume 17, Issue 2, 2025.

DOI10.3390/polym17020209

Accession Number WOS:001403857600001

Ris4. Cardoso GC; Correa DRN; Fosca M; Pometun EV; **Antoniac IV**; Grandini CR; Rau JV; *Current Strategies in Developing Antibacterial Surfaces for Joint Arthroplasty Implant Applications*, MATERIALS, Volume 18, Issue 1, 2025.

DOI10.3390/ma18010173

Accession Number WOS:001393704200001

Ris5. Deleanu IM; Grosu E; Ficai A; Ditu LM; Motelica L; Oprea OC; Pircalabioru GG; Sonmez M; Busuioc C; Ciocoiu R; **Antoniac VI**; *New Antimicrobial Materials Based on Plasticized Polyvinyl Chloride for Urinary Catheters: Preparation and Testing*, POLYMERS, Volume 16, Issue 21, 2024.

DOI10.3390/polym16213028

WOS:001351846700001

Ris6. Ioana TR; Boeru; **Antoniac I**; Mitrut; Staicu IE; Rauten AM; Uriciuc WA; Manolea HO; *Surface Analysis of Orthodontic Mini-Implants after Their Clinical Use*, JOURNAL OF FUNCTIONAL BIOMATERIALS, Volume 15, Issue 9, 2024.

DOI10.3390/jfb15090244

Accession Number WOS:001323935900001

Ris7. Manescu V; **Antoniac I**; Paltanea G; Nemoianu IV; Mohan AG; Antoniac A; Rau JV; Laptoiu SA; Mihai P; Gavrilă H; Al-Moushaly AR; Bodog AD; *Magnetic Hyperthermia in Glioblastoma Multiforme Treatment*, INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES, Volume 25, Issue 18, 2024.

DOI10.3390/ijms251810065

Accession Number WOS:001323759100001

Ris8. **Antoniac I**; Valeanu N; Niculescu M; Antoniac A; Robu A; Popescu L; Manescu V; Anusca D; Enachescu CI; *Outcomes of Birmingham Hip Resurfacing Based on Clinical Aspects and Retrieval Analysis of Failed Prosthesis*, MATERIALS, Volume 17, Issue 16, 2024.

DOI10.3390/ma17163965

Accession Number WOS:001305826300001

Ris9. Cordunianu MA; Cordunianu AGV; **Antoniac I**; Luca A; Niculescu M; Chiriac CO; Corneschi I; Mohor CI; *Experimental Analysis of a Failed Gamma Nail: A Case Report and Literature Review*, HEALTHCARE, Volume 12, Issue 16, 2024.

DOI10.3390/healthcare12161578

Accession Number WOS:001304663100001

Ris10. Cordunianu MA; Corneschi I; Bita AI; Ciocoiu R; Robu A; **Antoniac I**; Enachescu CI; *Surface analysis of a titanium plate implant used for humerus fracture after mechanical testing*, ACTA TECHNICA NAPOCENSIS SERIES-APPLIED MATHEMATICS MECHANICS AND ENGINEERING, Volume 67, Issue 2, Page 283-290, 2024.

Accession Number WOS:001398967500018

Ris11. Cardoso GC; Barbaro K; Kuroda PAB; De Bonis A; Teghil R; Monteleone V; Imperatori L; Ortenzi M; **Antoniac I**; Grandini CR; Rau JV; *Silver Containing Antimicrobial Coatings on Innovative Ti-30Nb-5Mo β -Alloy Prepared by Micro-Arc Oxidation for Biomedical Implant Applications*, COATINGS, Volume 14, Issue 2, 2024.

DOI10.3390/coatings14020214

Accession Number WOS:001172401100001

Ris12. Şolea MR; Semenescu A; Ileana A; Ciucă I; Ciocoiu R; Bița AI; **Antoniac I**; *A study of the surface free energy of stainless-steel surgical instruments*, UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN SERIES B-CHEMISTRY AND MATERIALS SCIENCE, Volume 86, Issue 4, 217-230, 2024.

Accession Number WOS:001380943500016

Ris13. Iordachescu (Şolea) MR; Semenescu A; Ileana A; Ciocoiu R; Bița AI; **Antoniac I**; *Preliminary study of tin and TiCN coatings for stainless steel surgical instruments*, UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN SERIES B-CHEMISTRY AND MATERIALS SCIENCE, Volume 86, Issue 4, 291-300, 2024.

Accession Number WOS:001380943500022

Ris14. Bololoi AE; Manea CA; **Antoniac IV**; Bololoi RV; Cojocar V; Talpeanu D; Patroi D; Geambazu LE; *The influence of spark plasma sintering parameters on the physical properties of CoCrMoNbTi Bio-HEA*, UNIVERSITY POLITEHNICA

OF BUCHAREST SCIENTIFIC BULLETIN SERIES B-CHEMISTRY AND MATERIALS SCIENCE, Volume 86, Issue 3, 227-236, 2024.

Accession Number WOS:001301114000018

Ris15. Nasrabadi HN; Ciuca S; Robu A; Stere A; **Antoniac I**; Valeanu N; Ciocoiu R; Enachescu CI; *Comparative analysis of surface properties of Ti6Al4V femoral stem hip prostheses and plate for long bone fractures used in orthopedic surgery*, UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN SERIES B-CHEMISTRY AND MATERIALS SCIENCE, Volume 86, Issue 3, 237-246, 2024.

Accession Number WOS:001301114000019

Ris16. Manescu V; **Antoniac I**; Antoniac A; Laptoiu D; Paltanea G; Ciocoiu R; Nemoianu IV; Gruionu LG; Dura H; *Bone Regeneration Induced by Patient-Adapted Mg Alloy-Based Scaffolds for Bone Defects: Present and Future Perspectives*, BIOMIMETICS, Volume 8, Issue 8, 2023.

DOI10.3390/biomimetics8080618

Accession Number WOS:001131224100001

Ris17. **Antoniac I**; Manescu V; Antoniac A; Paltanea G; *Magnesium-based alloys with adapted interfaces for bone implants and tissue engineering*, REGENERATIVE BIOMATERIALS, Volume 10, 2023.

DOI10.1093/rb/rbad095, 2023

Accession Number WOS:001105738200001

Ris18. Petrova A; Mamin G; Gnezdilov O; Fadeeva I; Antonova O; Forsyenskova A; **Antoniac IV**; Rau JV; Gafurov M; *Magnetic Resonance-Based Analytical Tools to Study Polyvinylpyrrolidone-Hydroxyapatite Composites*, POLYMERS, Volume 15, Issue 22, 2023.

DOI10.3390/polym15224445

Accession Number WOS:001120790700001

Ris19. Streza A; Antoniac A; Manescu V; Ciocoiu R; Cotrut CM; Miculescu M; Miculescu F; **Antoniac I**; Fosca M; Rau JV; Dura H; *In Vitro Studies Regarding the Effect of Cellulose Acetate-Based Composite Coatings on the Functional Properties of the Biodegradable Mg3Nd Alloys*, BIOMIMETICS, Volume 8, Issue 7, 2023.

DOI10.3390/biomimetics8070526

Accession Number WOS:001120752900001

Ris20. Gheorghita D; Antoniac I; Moldovan H; Antoniac A; Grosu E; Motelica L; Fica A; Oprea O; Vasile E; Ditu LM; Raiciu AD; *Influence of Lavender Essential Oil on the Physical and Antibacterial Properties of Chitosan Sponge for Hemostatic Applications*, INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES, Volume 24, Issue 22, 2023.

DOI10.3390/ijms242216312

Accession Number WOS:001119878000001

Ris21. Robu M; Radulescu B; Margarint I; Stiru O; **Antoniac I**; Gheorghita D; Voica C; Nica C; Cacoveanu M; Iliuta L; Iliescu VA; Moldovan H; *Surgical Strategy for Sternal Closure in Patients with Surgical Myocardial Revascularization Using Mammary Arteries*, JOURNAL OF CARDIOVASCULAR DEVELOPMENT AND DISEASE, Volume 10, Issue 11, 2023.

DOI10.3390/jcdd10110457

Accession Number WOS:001113695400001

Ris22. Izci A; Yavas B; **Antoniac I**; Goller G; Investigation of the Effects of Spark Plasma Sintering Parameters on Equiatomic CoCrFeNiMo High Entropy Alloy, JOURNAL OF MATERIALS ENGINEERING AND PERFORMANCE, 2023

DOI10.1007/s11665-023-08872-8

Accession Number WOS:001096900400001

Ris23. Bololoi AE; Geambazu LE; **Antoniac IV**; Bololoi RV; Manea CA; Cojocaru VD; Patroi D; *Solid-State Processing of CoCrMoNbTi High-Entropy Alloy for Biomedical Applications*, MATERIALS, Volume 16 Issue 19, 2023.

DOI10.3390/ma16196520

Accession Number WOS:001089169100001

Ris24. Dawod N; Miculescu M; **Antoniac IV**; Miculescu F; Agop-Forna D; *Metal-Ceramic Compatibility in Dental Restorations According to the Metallic Component Manufacturing Procedure*, MATERIALS, Volume 16, Issue 16, 2023.

DOI10.3390/ma16165556

Accession Number WOS:001057632700001

Ris25. Serboiu CS; Alius C; Dumitru A; Tapoi D; Costache M; Nica AE; Alexandra-Ana M; **Antoniac I**; Gradinaru S; Gallbladder Pancreatic Heterotopia-The Importance of Diagnostic Imaging in Managing Intraoperative Findings, MEDICINA-LITHUANIA, Volume 59 Issue 8, 2023.

DOI10.3390/medicina59081407

Accession Number WOS:001057155700001

Ris26. Dragomir L; **Antoniac I***; Manescu V; Antoniac A; Miculescu M; Trante O; Streza A; Cotrut CM; Forna DA; *Microstructure and Corrosion Behaviour of Mg-Ca and Mg-Zn-Ag Alloys for Biodegradable Hard Tissue Implants*, CRYSTALS, Volume 13, Issue 8, 2023.

DOI10.3390/cryst13081213

Accession Number WOS:001056853000001

Ris27. Sprio S; **Antoniac I**; Chevalier J; Iafisco M; Sandri M; Tampieri A; *Recent advances in bioceramics for health*, FRONTIERS IN BIOENGINEERING AND BIOTECHNOLOGY, Volume 11, 2023.

DOI10.3389/fbioe.2023.1264799

Accession Number WOS:001049385900001

Ris28. Radoi MA; Osiac E; Lascu LC; Gîngu O; Mitrut I; Salan AI; Mercut R; **Antoniac I**; Manolea HO; A digital approach for the analysis of the optical coherence tomography evaluation of hydroxyapatite - based bone graft materials, ROMANIAN JOURNAL OF ORAL REHABILITATION, Volume 15, Issue 3, Page 42-53, 2023.

Accession Number WOS:001083914900004

Ris29. Gharbi A; Oudadesse H; el Feki H; Cheikhrouhou-Koubaa W; Chatzistavrou X; Rau J; Heinämäki J; **Antoniac I**; Ashammakhi N; Derbel N; *High Boron Content Enhances Bioactive Glass Biodegradation*, JOURNAL OF FUNCTIONAL BIOMATERIALS, Volume 14 Issue 7, 2023.

DOI10.3390/jfb14070364

Accession Number WOS:001038543200001

Ris30. Gheorghita D; Moldovan H; Robu A; Bitu AI; Grosu E; Antoniac A; Corneschi I.; **Antoniac I***; Bodog AD; Bacila CI; *Chitosan-Based Biomaterials for Hemostatic Applications: A Review of Recent Advances*, INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES, Volume 24, Issue 13, 2023.

DOI10.3390/ijms241310540

Accession Number WOS:001037279600001

Ris31. Georgeanu VA; Gingu O; **Antoniac IV**; Manolea HO; *Current Options and Future Perspectives on Bone Graft and Biomaterials Substitutes for Bone Repair, from Clinical Needs to Advanced Biomaterials Research*, APPLIED SCIENCES-BASEL, Volume 13, Issue 14, 2023.

DOI10.3390/app13148471

Accession Number WOS:001034959100001

Ris32. Bitu T; Antoniac A; Ciuca I; Miculescu M; Cotrut CM; Paltanea G; Dura H; Corneschi I; **Antoniac I***; Carstoc ID; Bodog AD; Effect of Fluoride Coatings on the Corrosion Behavior of Mg-Zn-Ca-Mn Alloys for Medical Application, MATERIALS, Volume 16, Issue 13, 2023.

DOI10.3390/ma16134508

Accession Number WOS:001031202600001

Ris33. Dragomir L; Antoniac A; Manescu V; Robu A; Dinu M; Pana I; Cotrut CM; Kamel E; **Antoniac I**; Rau JV; Vladescu A; Preparation and characterization of hydroxyapatite coating by magnetron sputtering on Mg-Zn-Ag alloys for orthopaedic trauma implants, CERAMICS INTERNATIONAL, Volume 49, Issue 16, Page 26274-26288, 2023.

DOI10.1016/j.ceramint.2023.05.116

Accession Number WOS:001027803600001

Ris34. Forysenkova AA; Fadeeva IV; Deyneko DV; Gosteva AN; Mamin GV; Shurtakova DV; Davydova GA; Yankova VG; **Antoniac IV**; Rau JV; Polyvinylpyrrolidone-Alginate-Carbonate Hydroxyapatite Porous Composites for Dental Applications, MATERIALS, Volume 16, Issue 12, 2023.

DOI10.3390/ma16124478

Accession Number WOS:001014542200001

Ris35. Fosca M; Streza A; **Antoniac IV**; Vadala G; Rau JV; Ion-Doped Calcium Phosphate-Based Coatings with Antibacterial Properties, JOURNAL OF FUNCTIONAL BIOMATERIALS, Volume 14, Issue 5, 2023.

DOI10.3390/jfb14050250

Accession Number WOS:000997261800001

Ris36. Fadeeva IV; Deyneko DV; Knotko AV; Olkhov AA; Slukin PV; Davydova GA; Trubitsyna TA; Preobrazhenskiy II; Gosteva AN; **Antoniac IV**; Rau JV; Antibacterial Composite Material Based on Polyhydroxybutyrate and Zn-Doped Brushite Cement, POLYMERS, Volume 15, Issue 9, 2023.

DOI10.3390/polym15092106

Accession Number WOS:000987404000001

Ris37. Gharbi A; Oudadesse H; Ashammakhi N; Cheikhrouhou-Koubaa W; Blaeser A; Rau JV; **Antoniac I**; Derbel N; El Feki H; Thermodynamic behavior of bioactive glass in relationship with high fluorine content, CERAMICS INTERNATIONAL, Volume 49, Issue 11, Page 18238-18247, 2023.

DOI10.1016/j.ceramint.2023.02.194

Accession Number WOS:000989385000001

Ris38. Forna DA; Robu A; Budacu C; Petre M; Topoliceanu C; Dana SM; Stamatin O; **Antoniac I**; Forna N; Study regarding the role of barrier membranes in guided bone regeneration techniques, ROMANIAN JOURNAL OF ORAL REHABILITATION, Volume 15, Issue 2, Page 13-25, 2023.

Accession Number WOS:001035463900002

Ris39. Paltanea G; Manescu V; **Antoniac I***; Antoniac A; Nemoianu IV; Robu A; Dura H; A Review of Biomimetic and Biodegradable Magnetic Scaffolds for Bone Tissue Engineering and Oncology, INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES, Volume 24, Issue 5, 2023.

DOI10.3390/ijms24054312

Accession Number WOS:000948111600001

Ris40. Dawod N; Antoniac A; **Antoniac I**; Miculescu M; Robu A; Ungureanu E; Agop-Forna D; Cârstoc ID; Dura H; Dragomir BR; *Corrosion behavior and microstructural analysis of some Co-Cr alloys used for metal-ceramic restorations in dentistry*, UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN SERIES B-CHEMISTRY AND MATERIALS SCIENCE, Volume 85, Issue 4, Page 317-330, 2023.

Accession Number WOS:001126670800025

Ris41. Streza A; Antoniac A; Manescu V; Paltanea G; Robu A; Dura H; Verestiuc L; Stanica E; Voicu SI; **Antoniac I***; Cristea MB; Dragomir BR; Rau JV; Manolea MM; *Effect of Filler Types on Cellulose-Acetate-Based Composite Used as Coatings for Biodegradable Magnesium Implants for Trauma*, MATERIALS, Volume 16, Issue 2, 2023.

DOI10.3390/ma16020554

Accession Number WOS:000928381600001

Ris42. Gharbi A; Kallel AY; Kanoun O; Cheikhrouhou-Koubaa W; Contag CH; **Antoniac I**; Derbel N; Ashammakhi N; A Biodegradable Bioactive Glass-Based Hydration Sensor for Biomedical Applications, MICROMACHINES, Volume 14, Issue 1, 2023.

DOI10.3390/mi14010226

Accession Number WOS:000927488600001

Ris43. Chen HW; Yuan B; Zhao R; Yang X; Xiao ZW; Aurora A; Iulia BA; Zhu XD; **Iulian AV***; Zhang XD; *Evaluation on the corrosion resistance, antibacterial property and osteogenic activity of biodegradable Mg-Ca and Mg-Ca-Zn-Ag alloys*, JOURNAL OF MAGNESIUM AND ALLOYS, Volume 10, Issue 12, 3380-3396, 2022.

DOI10.1016/j.jma.2021.05.013

Accession Number WOS:000911252800006

Q1- rank 1 in METALLURGY & METALLURGICAL ENGINEERING - SCIE

Ris44. **Antoniac I**; Manescu V; Paltanea G; Antoniac A; Nemoianu IV; Petrescu MI; Dura H; Bodog AD; *Additive Manufactured Magnesium-Based Scaffolds for Tissue Engineering*, MATERIALS, Volume 15, Issue 23, 2022.

DOI10.3390/ma15238693

Accession Number WOS:000897445600001

Ris45. Yuan B; Chen HW; Zhao R; Deng XG; Chen G; Yang X; Xiao ZW; Aurora A; Iulia BA; Zhang K; Zhu XD; **Iulian AV***; Hai S; Zhang, XD; *Construction of a magnesium hydroxide/graphene oxide/hydroxyapatite composite coating on Mg-Ca-Zn-Ag alloy to inhibit bacterial infection and promote bone regeneration*, BIOACTIVE MATERIALS, Volume 18, 354-367, 2022.

DOI10.1016/j.bioactmat.2024.02.030

Accession Number WOS:000788641300001

Q1- rank 1 in MATERIALS SCIENCE, BIOMATERIALS – SCIE

Ris46. Vlasceanu S; Boboceca A; Petreanu CA; Badarau IA; Moldovan H; Gheorghita D; **Antoniac IV**; Mirea L; Diaconu CC; Savu C; *Pulmonary Crohn's Disease or Crohn's Disease with Lung Sarcoidosis? A Case Report and Literature Review*, HEALTHCARE, Volume 10, Issue 11, 2022.

DOI10.3390/healthcare10112267

Accession Number WOS:000910785500001

Ris47. Moldovan H; Ciomaga I; Nechifor E; Tiganasu R; Badea A; Dobra I; Nica C; Scarlat C; Gheorghita D; **Antoniac I**; Zaharia O; *A Rare Case of Left Ventricular Malignant Peripheral Nerve Sheath Tumour-Case Report and Review of the Literature*, MEDICINA-LITHUANIA, Volume 58, Issue 10, 2022.

DOI10.3390/medicina58101404

Accession Number WOS:000873278000001

Ris48. Moldovan H; Bulescu C; Cacoveanu M; Voica C; Safta S; Goicea M; Dobra I; **Antoniac I**; Gheorghita D; Zaharia O; *Minimally Invasive Surgical Repair of a Partial Atrioventricular Canal Defect in a 20-Year-Old Patient-A Case Report and Review of Literature*, JOURNAL OF CARDIOVASCULAR DEVELOPMENT AND DISEASE, Volume 9, Issue 10, 2022.

DOI10.3390/jcdd9100352

Accession Number WOS:000873168200001

Ris49. Manescu V; **Antoniac I**; Antoniac A; Paltanea G; Miculescu M; Bitai AI; Laptoiu S; Niculescu M; Stere A; Paun C; Cristea MB; *Failure Analysis of Ultra-High Molecular Weight Polyethylene Tibial Insert in Total Knee Arthroplasty*, MATERIALS, Volume 15, Issue 20, 2022.

DOI10.3390/ma15207102

Accession Number WOS:000872807700001

Ris50. Istrate B; Munteanu C; **Antoniac IV***; Lupescu SC; *Current Research Studies of Mg-Ca-Zn Biodegradable Alloys Used as Orthopedic Implants-Review*, CRYSTALS, Volume 12, Issue 10, 2022.
DOI10.3390/cryst12101468
Accession Number WOS:000872374100001

Ris51. Gheorghita D; Grosu E; Robu A; Ditu LM; Deleanu IM; Pircalabioru GG; Raiciu AD; Bitu AI; Antoniac A; **Antoniac VI**; *Essential Oils as Antimicrobial Active Substances in Wound Dressings*, MATERIALS, Volume 15, Issue 19, 2022.
DOI10.3390/ma15196923
Accession Number WOS:000866914900001

Ris52. Gheorghita D; Robu A; Antoniac A; **Antoniac I**; Ditu LM; Raiciu AD; Tomescu J; Grosu E; Saceleanu A; *In Vitro Antibacterial Activity of Some Plant Essential Oils against Four Different Microbial Strains*, APPLIED SCIENCES-BASEL, Volume 12, Issue 19, 2022.
DOI10.3390/app12199482
Accession Number WOS:000866648700001

Ris53. Fadeeva IV; Deyneko DV; Forysenkova AA; Morozov VA; Akhmedova SA; Kirsanova VA; Sviridova IK; Sergeeva NS; Rodionov SA; Udyanskaya IL; **Antoniac IV**; Rau JV; *Strontium Substituted beta-Tricalcium Phosphate Ceramics: Physicochemical Properties and Cytocompatibility*, MOLECULES, Volume 27, Issue 18, 2022.
DOI10.3390/molecules27186085
Accession Number WOS:000859523200001

Ris54. Robu A; Antoniac A; Ciocoiu R; Grosu E; Rau JV; Fosca M; Krasnyuk Jr; Pircalabioru GG; Manescu V; **Antoniac I***; Gradinaru S; *Effect of the Antimicrobial Agents Peppermint Essential Oil and Silver Nanoparticles on Bone Cement Properties*, BIOMIMETICS, Volume 7, Issue 3, 2022.
DOI10.3390/biomimetics7030137
Accession Number WOS:000858397900001

Ris55. Adam R; **Antoniac I**; Negoita S; Moldovan C; Rusu E; Orban C; Tudorache S; Harsovescu T; *In Vivo Study of Local and Systemic Responses to Clinical Use of Mg-1Ca Bioresorbable Orthopedic Implants*, DIAGNOSTICS, Volume 12, Issue 8, 2022.
DOI10.3390/diagnostics12081966
Accession Number WOS:000846969000001

Ris56. Rau JV; Fadeeva IV; Forysenkova AA; Davydova GA; Fosca M; Filippov YY; **Antoniac IV**; Antoniac A; D'Arco A; Di Fabrizio M; Petrarca M; Lupi S; Di Bucchianico MD; Yankova VG; Putlayev VI; Cristea MB; *Strontium Substituted Tricalcium Phosphate Bone Cement: Short and Long-Term Time-Resolved Studies and In Vitro Properties*, ADVANCED MATERIALS INTERFACES, Volume 9, Issue 21, 2022.
DOI10.1002/admi.202200803
Accession Number WOS:000816844400001

Ris57. Cordonianu MA; **Antoniac I**; Niculescu M; Paltanea G; Raiciu AD; Dura H; Forna N; Carstoc ID; Cristea MB; *Treatment of Knee Osteochondral Fractures*, HEALTHCARE, Volume 10, Issue 6, 2022.
DOI10.3390/healthcare10061061
Accession Number WOS:000816197000001

Ris58. Robu A; Ciocoiu R; Antoniac A; **Antoniac I**; Raiciu AD; Dura H; Forna N; Cristea MB; Carstoc ID; *Bone Cements Used for Hip Prosthesis Fixation: The Influence of the Handling Procedures on Functional Properties Observed during In Vitro Study*, MATERIALS, Volume 15, Issue 9, 2022.
DOI10.3390/ma15092967
Accession Number WOS:000796111800001

Ris59. Bitu AI; **Antoniac I**; Miculescu M; Stan GE; Leonat L; Antoniac A; Constantin B; Forna N; *Electrochemical and In Vitro Biological Evaluation of Bio-Active Coatings Deposited by Magnetron Sputtering onto Biocompatible Mg-0.8Ca Alloy*, MATERIALS, Volume 15, Issue 9, 2022.
DOI10.3390/ma15093100
Accession Number WOS:000795475600001

Ris60. Mohan AG; Ciurea AV; **Antoniac I**; Manescu V; Bodog A; Maghiar O; Marcu L; Ghiurau A; Bodog F; *Cranioplasty after Two Giant Intraosseous Angiolipomas of the Cranium: Case Report and Literature Review*, HEALTHCARE, Volume 10, Issue 4, 2022.
DOI10.3390/healthcare10040655
Accession Number WOS:000786996400001

Ris61. Moldovan H; **Antoniac I**; Gheorghita D; Safta MS; Preda S; Broasca M; Badila E; Fronea O; Scafa-Udriste A; Cacoveanu M; Molnar A; Costache VS; Zaharia O; *Biomaterials as Haemostatic Agents in Cardiovascular Surgery: Review of Current Situation and Future Trends*, POLYMERS, Volume 14, Issue 6, 2022.
DOI10.3390/polym14061189
Accession Number WOS:000776311300001

Ris62. Fadeeva IV; Deyneko DV; Barbaro K; Davydova GA; Sadovnikova MA; Murzakhanov FF; Fomin AS; Yankova VG; **Antoniac IV**; Barinov SM; Lazoryak BI; Rau JV; *Influence of Synthesis Conditions on Gadolinium-Substituted Tricalcium Phosphate Ceramics and Its Physicochemical, Biological, and Antibacterial Properties*, NANOMATERIALS, Volume 12, Issue 5, 2022.

DOI10.3390/nano12050852

Accession Number WOS:000768332300001

Ris63. Adam R; **Antoniac I**; Avram GM; Niculescu M; *Mg-1Ca alloy intramedullary nailing influence on bone callus formation and on vital organs functions, as an alternative to bioplastics*, ROMANIAN JOURNAL OF MILITARY MEDICINE, Volume 125, Issue 1, Page 31-41, 2022.

Accession Number WOS:000768769300009

Ris64. Antoniac I; Miculescu M; Manescu V; Stere A; Quan PH; Paltanea G; Robu A; Earar K; *Magnesium-Based Alloys Used in Orthopedic Surgery*, MATERIALS, Volume 15, Issue 3, 2022.

DOI10.3390/ma15031148

Accession Number WOS:000756544000001

Ris65. Quan PH; **Antoniac I**; Miculescu F; Antoniac A; Manescu V; Robu A; Bitai AI; Miculescu M; Saceleanu A; Bodog AD; Saceleanu V; *Fluoride Treatment and In Vitro Corrosion Behavior of Mg-Nd-Y-Zn-Zr Alloys Type*, MATERIALS, Volume 15, Issue 2, 2022.

DOI10.3390/ma15020566

Accession Number WOS:000757583600001

Ris66. Alexandrescu D; **Antoniac I**; Olteanu C; Anghel L; Sarbu N; Ciocoiu R; Scutariu MM; Surlari Z; Ioanid N; Stefanescu V; *Influence of Thermal Processing for 3D Printed Components*, MATERIALE PLASTICE, Volume 58, Issue 4, Page 250-260, 2021

Accession Number: WOS:000756908700003

Ris67. Robu A; Antoniac A; Grosu E; Vasile E; Raiciu AD; Iordache F; **Antoniac VI**; Rau JV; Yankova VG; Ditu LM; Saceleanu V; *Additives Imparting Antimicrobial Properties to Acrylic Bone Cements*, MATERIALS, Volume 14, Issue 22, 2021.

DOI10.3390/ma14227031

Accession Number WOS:000727445400001

Ris68. Manescu V; Paltanea G; **Antoniac I**; Vasilescu M; *Magnetic Nanoparticles Used in Oncology*, MATERIALS, Volume 14, Issue 20, Number article 5948, 2021.

DOI: 10.3390/ma14205948

Accession Number: WOS:WOS:000716317000001

Ris69. Antoniac IV; Antoniac A; Vasile E; Tecu C; Fosca M; Yankova VG; Rau JV; *In vitro characterization of novel nanostructured collagen-hydroxyapatite composite scaffolds doped with magnesium with improved biodegradation rate for hard tissue regeneration*, BIOACTIVE MATERIALS, Volume 6, Issue 10, 2021.

DOI: 10.1016/j.bioactmat.2021.02.030

Accession Number: WOS:000672673500028

Q1- rank 1 in MATERIALS SCIENCE, BIOMATERIALS – SCIE

Ris70. Chirca O; Biclesanu C; Florescu A; Stoia DI; Pangica AM; Burcea A; Vasilescu M; **Antoniac IV**; *Adhesive-Ceramic Interface Behavior in Dental Restorations. FEM Study and SEM Investigation*, MATERIALS, Volume 14, Issue 17, Number article 5048, 2021.

DOI: 10.3390/ma14175048

Accession Number: WOS:000694396800001

Ris71. Antoniac I; Antoniac A; Gheorghita D; Gradinaru S; *In Vitro Study on Biodegradation of Absorbable Suture Materials Used for Surgical Applications*, MATERIALE PLASTICE, Volume 58, Issue 2, Number article 633, 2021.

DOI: 10.37358/MP.21.2.5484

Accession Number: WOS:000691287100001

Ris72. Ghiban B; Pascu NE; **Antoniac IV**; Jiga G; Milea C; Petre G; Gheorghe C; Munteanu C; Istrate B; *Surface Characterization of Fracture in Polylactic Acid vs. PLA plus Particle (Cu, Al, Graphene) Insertions by 3D Fused Deposition Modeling Technology*, COATINGS, Volume 11, Issue 6, Article number 633, 2021.

DOI: 10.3390/coatings11060633

Accession Number: WOS: 000665551900001

Ris73. Ginghina RE; Lazaroaie C; **Antoniac IV**; Cinteza O; Tiganescu TV; Popescu D; Alius C; Baicus A; *Silver and gold nanoparticles and quaternary ammonium salts for the disinfection of SARS-COV-2*, UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN SERIES B-CHEMISTRY AND MATERIALS SCIENCE, Volume 83, Issue4, Page 163-172, 2021.

Accession Number: WOS:000731356100015

- Ris74.** Alexandrescu D; Vasilescu M; Sfat C; Tabaras D; Gheorghita D; **Antoniac I**; Ciocoiu R, *A study on 3D printed component's surface made of PLA with silver particles*, UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN SERIES B-CHEMISTRY AND MATERIALS SCIENCE, Volume 83, Issue2, Page 303 - 312, 2021.
Accession Number: WOS:000661663200026
- Ris75.** Neculescu DA; **Antoniac I**; Milea C; Ciurdas M, *Structural analysis and corrosion resistance of dental brackets*, UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN SERIES B-CHEMISTRY AND MATERIALS SCIENCE, Volume 83, Issue 2, Page 283-290, 2021.
Accession Number: WOS:000661663200024
- Ris76.** **Antoniac I**; Adam R; Bitu A; Miculescu M; Trante O; Petrescu IM; Pogarasteanu M; *Comparative Assessment of In Vitro and In Vivo Biodegradation of Mg-1Ca Magnesium Alloys for Orthopedic Applications*, MATERIALS, Volume 14, Issue 1, Number article 84, 2021.
DOI: 10.3390/ma14010084
Accession Number: WOS:000606152800001
- Ris77.** Cavalu S; **Antoniac IV**; Mohan A; Bodog F; Doicin C; Mates I; Ulmeanu M; Murzac R; Semenescu A; *Nanoparticles and Nanostructured Surface Fabrication for Innovative Cranial and Maxillofacial Surgery*, MATERIALS, Volume 13, Issue 23, Article Number: 5391, 2020.
DOI: 10.3390/ma13235391
Accession Number: WOS:000597525200001
- Ris78.** Fadeeva IV; Kalita VI; Komlev DI; Radiuk AA; Fomin AS; Davidova GA; Fursova NK; Murzakhanov FF; Gafurov MR; Fosca M; **Antoniac IV**; Barinov SM; Rau JV; *In Vitro Properties of Manganese-Substituted Tricalcium Phosphate Coatings for Titanium Biomedical Implants Deposited by Arc Plasma*, MATERIALS, Volume 13, Issue 19, Article Number 4411, 2020.
Accession Number: WOS:000586426000001
- Ris79.** Rau JV; Fosca M; Fadeeva IV; Kalay S; Culha M; Raucchi MG; Fasolino I; Ambrosio L; **Antoniac IV**; Uskokovic V; *Tricalcium phosphate cement supplemented with boron nitride nanotubes with enhanced biological properties*, MATERIALS SCIENCE & ENGINEERING C-MATERIALS FOR BIOLOGICAL APPLICATIONS, Volume 114, Article Number 111044, 2020.
DOI: 10.1016/j.msec.2020.111044
Accession Number: WOS:000579654700061
- Ris80.** Istrate B; Rau JV; Munteanu C; **Antoniac IV**; Saceleanu V; *Properties and in vitro assessment of ZrO₂-based coatings obtained by atmospheric plasma jet spraying on biodegradable Mg-Ca and Mg-Ca-Zr alloys*, CERAMICS INTERNATIONAL, Volume 46, Issue 10, 15897-15906, 2020.
DOI: 10.1016/j.ceramint.2020.03.138
Accession Number: WOS:000533512000020
- Ris81.** **Antoniac IV**; Filipescu M; Barbaro K; Bonciu A; Birjega R; Cotrut CM; Galvano E; Fosca M; Fadeeva IV; Vadala G; Dinescu M; Rau JV; *Iron Ion-Doped Tricalcium Phosphate Coatings Improve the Properties of Biodegradable Magnesium Alloys for Biomedical Implant Application*, ADVANCED MATERIALS INTERFACES, Volume 7, Issue 16, Article Number 2000531, 2020.
DOI: 10.1002/admi.202000531
Accession Number: WOS:000540725700001
- Ris82.** Onisai M; Dumitru A; Iordan I; Alius C; Teodor O; Alexandru A; Gheorghita D; **Antoniac I**; Nica A; Mihailescu AA; *Synchronous Multiple Breast Cancers-Do We Need to Reshape Staging?*, MEDICINA-LITHUANIA, Volume 56, Issue 5, Article Number 230, 2020.
DOI: 10.3390/medicina56050230
Accession Number: WOS:000541026200036
- Ris83.** Costache VS; Meekel JP; Costache A; Melnic T; Solomon C; Chitic AM; Bucurenciu C; Moldovan H; **Antoniac I**; Candea G; Yeung KK; *Geometric Analysis of Type B Aortic Dissections Shows Aortic Remodeling After Intervention Using Multilayer Stents*, MATERIALS, Volume 13, Issue 10, Article Number 2274, 2020.
DOI: 10.3390/ma13102274
Accession Number: WOS:000539277000066
- Ris84.** Cavalu S; Fritea L; Brocks M; Barbaro K; Murvai G; Costea TO; **Antoniac I**; Verona C; Romani M; Latini A; Zilli R; Rau JV; *Novel Hybrid Composites Based on PVA/SeTiO₂ Nanoparticles and Natural Hydroxyapatite for Orthopedic Applications: Correlations between Structural, Morphological and Biocompatibility Properties*, MATERIALS, Volume 13, Issue 9, Article Number 2077, 2020.
DOI: 10.3390/ma13092077
Accession Number: WOS:000535941100071
- Ris85.** Rapa M; Stefan LM; Zaharescu T; Seciu AM; Turcanu AA; Matei E; Predescu AM; **Antoniac I***; Predescu C; *Development of Bionanocomposites Based on PLA, Collagen and AgNPs and Characterization of Their Stability and In Vitro Biocompatibility*, APPLIED SCIENCES-BASEL, Volume 10, Issue 7, Article Number 2265, 2020.

DOI: 10.3390/app10072265

Accession Number: WOS:000533356200064

Ris86. Nica M; Cretu B; Ene D; **Antoniac I**; Gheorghita D; Ene R: *Failure Analysis of Retrieved Osteosynthesis Implants*, MATERIALS, Volume 13, Issue 5, Article Number 1201, 2020.

DOI: 10.3390/ma13051201

Accession Number: WOS:000524060200179

Ris87. Gradinaru S; Stoicea MC; Mocanu L; **Antoniac I**; Gheorghita D; Grigore AGM; *Rare Breast Carcinoma with Paradoxical Plasma Cell Immunoprofile: A Case Report*, MEDICINA-LITHUANIA, Volume 56, Issue 2, Article Number 62, 2020.

Accession Number: WOS:000519235800012

DOI: 10.3390/medicina56020062

Ris88. **Antoniac I**; Miculescu F; Cotrut C; Ficai A ; Rau JV; Grosu E; Antoniac A; Tecu C; Cristescu I; *Controlling the Degradation Rate of Biodegradable Mg-Zn-Mn Alloys for Orthopedic Applications by Electrophoretic Deposition of Hydroxyapatite Coating*, MATERIALS, Volume 13, Issue 2, Article Number 263, 2020.

Accession Number: WOS:000515499900010

DOI: 10.3390/ma13020263

Ris89. Ginghină RE; Bojin D; Miculescu F; Zamora Iordache P; Țigănescu TV; **Antoniac I**; *The pH influence in the process of industrial wastewater treatment*, UPB SCIENTIFIC BULLETIN, SERIES B: CHEMISTRY AND MATERIALS SCIENCE, Volume 82, Issue 4, 355-365, 2020.

Accession Number WOS:000610101300029

Ris90. Cernea A; **Antoniac I**; Tabaras D; Trante O; Gradinaru S; *New modified viscoelastic solution associated with magnetic field effect for the advanced treatment of knee osteoarthritis*, UPB SCIENTIFIC BULLETIN, SERIES B: CHEMISTRY AND MATERIALS SCIENCE, Volume 82, Issue 4, 283-294, 2020.

Accession Number WOS:000610101300024

Ris91. Navodariu N; **Antoniac I**; Tăbăraș D; Grigorescu G; Ciocoiu R; Trante O; Turcu R; Necșulescu A; Raiciu AD; *A study on the mechanical properties of car panels straightened by four methods*, UPB SCIENTIFIC BULLETIN, SERIES B: CHEMISTRY AND MATERIALS SCIENCE, Volume 82, Issue 4, 257-272, 2020.

Accession Number WOS:000610101300022

Ris92. Dumitru A; Alius C; Nica AE; **Antoniac I**; Gheorghita D; Gradinaru S; *Fatal outcome of gastric perforation due to infection with Sarcina spp. A case report*, IDCASES, Volume 19, 2020.

DOI10.1016/j.idcr.2020.e00711

Accession Number WOS:000544911800006

Ris93. Zhao R; Chen SY; Zhao WL; Yang L; Yuan B; Voicu SI; **Antoniac IV**; Yang X; Zhu XD; Zhang XD; *A bioceramic scaffold composed of strontium-doped three-dimensional hydroxyapatite whiskers for enhanced bone regeneration in osteoporotic defects*, THERANOSTICS, Volume 10, Issue 4, 1572-1589, 2020.

DOI: 10.7150/thno.40103

Accession Number: WOS:000503871400007

Ris94. Gheorghe D; Pencea I; **Antoniac IV**; Turcu RN; *Investigation of the Microstructure, Hardness and Corrosion Resistance of a New 58Ag24Pd11Cu2Au2Zn1.5In1.5Sn Dental Alloy*, MATERIALS, Volume 12, Issue 24, 2019.

DOI10.3390/ma12244199

Accession Number WOS:000507308200177

Ris95. Pantea M; Ciocoiu R; Tancu AMC; Nina DM; Petre A; **Antoniac IV**; Melescanu-Imre M; *Comparative Study on Two Methods Used in Obtaining 3D Printed Dental Models*, MATERIALE PLASTICE, Volume 56, Issue 4, Page 812-816, 2019.

Accession Number WOS:000509920700019

Ris96. Cristescu I; **Antoniac I**; Branzei M; Ghiban B; Ciocoiu R; Ciuca I; Semenescu A; Gradinaru S; Pop D; Raiciu AD; *Fractography Study of Explanted Intramedullary Nails*, MATERIALE PLASTICE, Volume 56, Issue 4, Page 759-773, 2019.

Accession Number WOS:000509920700014

Ris97. Navodariu N; Branzei M; Ciocoiu R; Ciuca I; Coman R; Raiciu AD; Semenescu A; **Antoniac I**; Gradinaru S; Cristescu I; *Effect of Local Heating on the Mechanical Characteristics of Repaired Automotive Panels*, MATERIALE PLASTICE, Volume 56, Issue 4, Page 750-758, 2019.

Accession Number WOS:000509920700013

Ris98. Rau JV; Fadeeva IV; Fomin AS; Barbaro K; Galvano E; Ryzhov AP; Murzakhanov F; Gafurov M; Orlinskii S; **Antoniac I**; Uskoković V; *Sic Parvis Magna: Manganese-Substituted Tricalcium Phosphate and Its Biophysical Properties*, ACS BIOMATER. SCI. ENG., Volume 5, Issue 12, 6632-6644, 2019.

DOI: 10.1021/acsbiomaterials.9b01528

Accession Number: WOS: 000502193400029

Ris99. Dascalu CA; Maidaniuc A; Pandele AM; Voicu SI; Machedon-Pisu T; Stan GE; Cimpean A; Mitran V; **Antoniac IV**; Miculescu F; *Synthesis and characterization of biocompatible polymer-ceramic film structures as favorable interface in guided bone regeneration*, APPLIED SURFACE SCIENCE, Volume 494, 335-352, 2019.

DOI: 10.1016/j.apsusc.2019.07.098

Accession Number: WOS: 000487838900040

Q1- rank 1 in MATERIALS SCIENCE, COATINGS & FILMS – SCIE

Ris100. Tecu C; **Antoniac I**; Goller G; Yava B; Gheorghe D; Antoniac A; Ciuca I; Semenescu A; Raiciu AD; Cristescu I; *The Sintering Behaviour and Mechanical Properties of Hydroxyapatite - Based Composites for Bone Tissue Regeneration*, MATERIALE PLASTICE, Volume 56, Issue 3, 644-648, 2019.

Accession Number: WOS: 000487764000035

Ris101. Karlsdottir SN; Csaki I; **Antoniac IV**; Manea CA; Stefanioiu R; Magnus F; Miculescu F; *Corrosion behavior of AlCrFeNiMn high entropy alloy in a geothermal environment*, GEOTHERMICS, Volume 81, 32-38, 2019.

DOI: 10.1016/j.geothermics.2019.04.006

Accession Number: WOS: 000472689800003

Ris102. Dawod N; Florescu A; **Antoniac IV**; Stoia DI; Hancu V; Biclesanu FC; *The FEA Study of the Biomechanic Behavior of Canine Reconstructed with Composite Resin*, REVISTA DE CHIMIE, Volume 70, Issue 7, 2456-2462, 2019.

Accession Number: WOS: 000485843500034

Ris103. Buruiana AM; Biclesanu FC; **Antoniac IV**; Miculescu M; Predescu AM; Hancu V; *Clinical-statistical Study on the Biomimetic Adhesion of whole Ceramic Inlays*, REVISTA DE CHIMIE, Volume 70, Issue 6, 1934-1941, 2019.

Accession Number: WOS: 000475860100010

Ris104. Moldovan H; Popescu D; Buliga T; Filip A; **Antoniac I**; Gheorghita D; Moar A; *Gastric Adenocarcinoma Associated with Acute Endocarditis of the Aortic Valve and Coronary Artery Disease in a 61-Year-Old Male with Multiple Comorbidities-Combined Surgical Management-Case Report*, MEDICINA-LITHUANIA Volume 55, Issue 6, 1-7, 2019.

DOI: 10.3390/medicina55060242

Accession Number: WOS: 000475303800027

Ris105. **Antoniac IV**; Stoia DI; Ghiban B; Tecu C; Miculescu F; Vigar C; Saceleanu V; *Failure Analysis of a Humeral Shaft Locking Compression Plate Surface Investigation and Simulation by Finite Element Method*, MATERIALS, Volume 12, Issue 7, 1-18, Article Number 1128, 2019.

Accession Number: WOS: 000465500700127

DOI: 10.3390/ma12071128

Ris106. Cojocar FD; Balan V; Popa M; Lobiuc A; Antoniac A; **Antoniac IV**; Verestiuc L; *Biopolymers - Calcium phosphates composites with inclusions of magnetic nanoparticles for bone tissue engineering*, INTERNATIONAL JOURNAL OF BIOLOGICAL MACROMOLECULES, Volume 125, 612-620, 2019.

DOI: 10.1016/j.ijbiomac.2018.12.083

Accession Number: WOS: 000458222000067

Ris107. **Antoniac I**; Popescu D; Zapciu A; Antoniac A; Miculescu F; Moldovan H; *Magnesium Filled Polylactic Acid (PLA) Material for Filament Based 3D Printing*, MATERIALS, Volume 12, Issue 5, 1-13, Article Number 719, 2019.

DOI: 10.3390/ma12050719

Accession Number: WOS: 000462543700035

Ris108. Mocanu AC; Stan GE; Maidaniuc A; Miculescu M; **Antoniac IV**; Ciocoiu RC; Voicu SI; Mitran V; Cimpean A; Miculescu F; *Naturally-Derived Biphasic Calcium Phosphates through Increased Phosphorus-Based Reagent Amounts for Biomedical Applications*, MATERIALS, Volume 12, Issue 3, 1-17, Article Number 381, 2019.

DOI: 10.3390/ma12030381

Accession Number: WOS: 000460768000050

Ris109. Pantea M; **Antoniac I**; Trante O; Ciocoiu R; Fischer CA; Traistaru T; *Correlations between connector geometry and strength of zirconia-based fixed partial dentures*, MATERIALS CHEMISTRY AND PHYSICS, Volume 222, 96-109, 2019.

DOI: 10.1016/j.matchemphys.2018.09.063

Accession Number: WOS: 000450379900012

Ris110. Mates I; **Antoniac I**; Laslo V; Vicas S; Brocks M; Fritea L; Milea C; Mohan A; Cavalu S; *Selenium nanoparticles: production, characterization and possible applications in biomedicine and food science*, UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN SERIES B-CHEMISTRY AND MATERIALS SCIENCE, Volume 81, Issue 1, 205-216, 2019.

Accession Number: WOS: 000465035300018

Ris111. Buzatu M; Geanta V; Stefanioiu R; Butu M; Petrescu MI; Buzatu M; Ghica SI; **Antoniac I**; Iacob G; Niculescu F; Marcu DF; Moldovan H; *Mathematical modeling for correlation of the resistance to compression with the parameters M_d , B_o and E/A , for the design of titanium beta alloys developed for medical applications*, UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN SERIES B-CHEMISTRY AND MATERIALS SCIENCE, Volume 81, Issue 1, 183-192, 2019.

Accession Number: WOS: 000465035300016

Ris112. Almasi A; **Antoniac I**; Focsaneanu S; Manole M; Ciocoiu R; Trante O; Earar K; Saceleanu A; Porumb A; Ratiu C; *Design improvement of Y-TZP three unit bridges by predicted stress concentration using FEA and experimental failure modes after three point bending test*, REVISTA DE CHIMIE, Volume 70, Issue 1, 336-342, 2019.

Accession Number: WOS: 000460428100074

Ris113. Buzatu M; Geanta V; Stefanoiu R; Butu M; Petrescu MI; Buzatu M; **Antoniac I**; Iacob G; Niculescu F; Ghica SI; Moldovan H; *Investigations into Ti-15Mo-W alloys developed for medical applications*, MATERIALS, Volume 12, Issue 1, 1-10, Article Number 147, 2019.

DOI: 10.3390/ma12010147

Accession Number: WOS: 000456410200147

Ris114. Cavalu S; **Antoniac IV**; Fritea L; Mates IM; Milea C; Laslo V; Vicas S; Mohan A; *Surface modifications of the titanium mesh for cranioplasty using selenium nanoparticles coating*, JOURNAL OF ADHESION SCIENCE AND TECHNOLOGY, Volume 32, Issue 22, 2509-2522, 2018.

DOI: 10.1080/01694243.2018.1490067

Accession Number: WOS: 000455235400008

Ris115. Rau JV; **Antoniac I**; Filipescu M; Cotrut C; Fosca M; Nistor LC; Birjega R; Dinescu M; *Hydroxyapatite coatings on Mg-Ca alloy prepared by Pulsed Laser Deposition: Properties and corrosion resistance in Simulated Body Fluid*, CERAMICS INTERNATIONAL, Volume 44, Issue 14, 16678-16687, 2018.

DOI: 10.1016/j.ceramint.2018.06.095

Accession Number: WOS: 000442714100072

Ris116. Moldovan H; Gheorghita D; **Antoniac I**; Gheorghita D; Fiori F; Mohan A; Raftu G; Ionel C; Costache V; *Bioadhesives used in cardiovascular surgery*, REVISTA DE CHIMIE, Volume 69, Issue 10, 2799-2803, 2018.

Accession Number: WOS: 000451925300039

Ris117. Gabor A; Zaharia C; Todericiu V; Szuhanek C; Cojocariu AC; Duma VF; Sticlaru C; Negrutiu ML; **Antoniav IV**; Sinescu C; *Adhesion of scaffolds with implants to the mandibular bone with a defect*, MATERIALE PLASTICE, Volume 55, Issue 3, 393-397, 2018.

Accession Number: WOS: 000452711500030

Ris118. Mitran V; Ion R; Miculescu F; Necula MG; Mocanu AC; Stan GE; **Antoniac IV**; Cimpean A; *Osteoblast cell response to naturally derived calcium phosphate-based materials*, MATERIALS, Volume 11, Issue 7, 1-15, Article Number 1097, 2018.

DOI: 10.3390/ma11071097

Accession Number: WOS: 000442117300048

Ris119. Guazzo R; Gardin C; Bellin G; Sbricoli L; Ferroni L; Ludovichetti FS; Piattelli A; **Antoniac I**; Bressan E; Zavan B; *Graphene-based nanomaterials for tissue engineering in the dental field*, NANOMATERIALS, Volume 8, Issue 5, 1-31, Article Number 349, 2018.

DOI: 10.3390/nano8050349

Accession Number: WOS: 000435198300080

Ris120. Ravis M; Pricop M; Talpos S; Ciocoiu R; **Antoniac I**; Gheorghita D; Trante O; Moldovan H; Grigorescu G; Saceleanu V; Mohan A; *Influence of the bone cements processing on the mechanical properties in cranioplasty*, REVISTA DE CHIMIE, Volume 69, Issue 4, 990-993, 2018.

Accession Number: WOS: 000433223000049

Ris121. Arpad S; Trambitas C; Matei E; Vasile E; Pal F; **Antoniac IV**; Voicu SI; Bataga T; Fodor R; *Effect of osteoplasty with bioactive glass (S53P4) in bone healing - in vivo experiment on common european rabbits (Oryctolagus cuniculus)*, REVISTA DE CHIMIE, Volume 69, Issue 2, 429-433, 2018.

Accession Number: WOS: 000427327700030

Ris122. Cavalu Simona; Kamel E; Laslo V; Fritea L; Costea T; **Antoniac IV**; Vasile EE; Antoniac A; Semenescu A; Mohan A; Saceleanu V; Vicas S; *Eco-friendly, facile and rapid way for synthesis of selenium nanoparticles production, structural and morphological characterization*, REVISTA DE CHIMIE, Volume 68, Issue 12, 2963-2966, 2017.

Accession Number: WOS: 000423261900050

Ris123. Earar K; **Antoniac VI**; Baciuc S; Bran S; Onisor F; Milea C; Mohan A; Grigoriu R; Saceleanu A; Manole M; *Etching treatment effect on surface morphology of dental structures*, REVISTA DE CHIMIE, Volume 68, Issue 11, 2700-2703, 2017.

Accession Number: WOS: 000416751800049

Ris124. **Antoniac I**; Negrusoiu M; Mardare M; Socoliuc C; Zazgyva A; Niculescu M; *Adverse local tissue reaction after 2 revision hip replacements for ceramic liner fracture A case report*, MEDICINE, Volume 96, Issue 19, 1-5, Article Number e6687, 2017.

DOI: 10.1097/MD.0000000000006687

Accession Number: WOS: 000401188600012

- Ris125.** Ghica GV; Toma CM; Buzatu M; Petrescu MI; Iacob G; **Antoniac IV**; Vasile E; Veglio F; *Recovery of active cathode material containing Co and Li from waste Li-Ion batteries*, UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN SERIES B-CHEMISTRY AND MATERIALS SCIENCE, Volume 79, Issue 3, 75-86, 2017.
Accession Number: WOS: 000416417800008
- Ris126.** Marinescu R; **Antoniac VI**; Stoia DI; Laptoiu DC; *Clavicle anatomical osteosynthesis plate breakage - failure analysis report based on patient morphological parameters*, ROMANIAN JOURNAL OF MORPHOLOGY AND EMBRYOLOGY, Volume 58, Issue 2, 593-598, 2017.
Accession Number: WOS: 000406647000033
- Ris127.** Branzei M; Pencea I; Matei AA; Sfat CE; **Antoniac I**; Turcu RN; Manoliu V; *Influence of high temperature exposure on the adhesion of a micro-composite refractory enamel to a Ni-18Cr-12W superalloy*, JOURNAL OF ADHESION SCIENCE AND TECHNOLOGY, Volume 31, Issue 23, 2555-2570, 2017.
DOI: 10.1080/01694243.2017.1310172
Accession Number: WOS: 000408668200003
- Ris128.** Bratila E; Comandasu D; Milea C; Berceanu C; Vasile E; **Antoniac I**; Mehedintu C; *Effect of the surface modification of the synthetic meshes used in the surgical treatment of pelvic organ prolapse on the tissue adhesion and clinical functionality*, JOURNAL OF ADHESION SCIENCE AND TECHNOLOGY, Volume 31, Issue 18, 2028-2043, 2017.
DOI: 10.1080/01694243.2017.1294358
Accession Number: WOS: 000402964600004
- Ris129.** Corobea MC; Muhulet O; Miculescu F; **Antoniac IV**; Vuluga Z; Florea D; Vuluga DM; Butnaru M; Ivanov D; Voicu SI; Thakur VK; *Novel nanocomposite membranes from cellulose acetate and clay-silica nanowires*, POLYMERS FOR ADVANCED TECHNOLOGIES, Volume 27, Issue 12, 1586-1595, 2016.
DOI: 10.1002/pat.3835
Accession Number: WOS: 000387663300005
- Ris130.** **Antoniac I**; Sinescu C; Antoniac A; *Adhesion aspects in biomaterials and medical devices*, JOURNAL OF ADHESION SCIENCE AND TECHNOLOGY, Volume 30, Issue 16, 1711-1715, 2016.
DOI: 10.1080/01694243.2016.1170959
Accession Number: WOS: 000373945200001
- Ris131.** Manolea H; **Antoniac I**; Miculescu M; Rica R; Platon A; Melnicenco R; *Variability of the composite resins adhesion with the dental substrate preparation and the used adhesive type*, JOURNAL OF ADHESION SCIENCE AND TECHNOLOGY, Volume 30, Issue 16, 1754-1764, 2016.
DOI: 10.1080/01694243.2015.1091676
Accession Number: WOS: 000373945200005
- Ris132.** Sarosi C; Biris AR; Antoniac A; Boboia S; Alb C; **Antoniac I**; Moldovan M; *The nanofiller effect on properties of experimental graphene dental nanocomposites*, JOURNAL OF ADHESION SCIENCE AND TECHNOLOGY, Volume 30, Issue 16, 1779-1794, 2016.
DOI: 10.1080/01694243.2016.1161969
Accession Number: WOS: 000373945200007
- Ris133.** Rau JV; **Antoniac I***; Fosca M; De Bonis A; Blajan AI; Cotrut C; Graziani V; Curcio M; Cricenti A; Niculescu M; Ortenzi M; Teghil R; *Glass-ceramic coated Mg-Ca alloys for biomedical implant applications*, MATERIALS SCIENCE & ENGINEERING C-MATERIALS FOR BIOLOGICAL APPLICATIONS, Volume 64, 362-369, 2016.
DOI: 10.1016/j.msec.2016.03.100
Accession Number: WOS: 000376547700044
- Ris134.** **Antoniac I**; Matei E; Munteanu C; *Advanced eco-technologies and materials for environmental and health application*, ENVIRONMENTAL ENGINEERING AND MANAGEMENT JOURNAL, Volume 15, Issue 5, 953-954, 2016.
Accession Number: WOS: 000381274100001
- Ris135.** Cirstoiu M; Munteanu O; **Antoniac I**; Cirstoiu C; *Comparison of pain level during and after intrauterine device insertion: Levonorgestrel-releasing intrauterine system versus the copper T intrauterine device*, ENVIRONMENTAL ENGINEERING AND MANAGEMENT JOURNAL, Volume 15, Issue 5, 965-972, 2016.
Accession Number: WOS: 000381274100003
- Ris136.** Stefanescu T; **Antoniac IV**; Popovici RA; Galuscan A; Tirca T; *Ni-Ti rotary instrument fracture analysis after clinical use. Structure changes in used instruments*, ENVIRONMENTAL ENGINEERING AND MANAGEMENT JOURNAL, Volume 15, Issue 5, 981-988, 2016.
Accession Number: WOS: 000381274100005
- Ris137.** Craciunescu E; Sinescu C; Negrutiu ML; Pop DM; Lauer HC; Rominu M; Hutiu G; Bunoiu M; Duma VF; **Antoniac I**; *Shear bond strength tests of zirconia veneering ceramics after chipping repair*, JOURNAL OF ADHESION SCIENCE AND TECHNOLOGY, Volume 30, Issue 6, 666-676, 2016.
DOI: 10.1080/01694243.2015.1117304

Accession Number: WOS: 000366836000008

Ris138. Bită AI; Antoniac A; Cotrut C; Vasile E; Ciuca I; Niculescu M; **Antoniac I**; *In vitro degradation and corrosion evaluation of Mg-Ca alloys for biomedical applications*, JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS, Volume 18, Issue 3-4, 394-398, 2016.

Accession Number: WOS: 000375964800029

Ris139. Mareci D; Bolat G; Izquierdo J; Crimu C; Munteanu C; **Antoniac I**; Souto RM; *Electrochemical characteristics of bioresorbable binary MgCa alloys in Ringer's solution: Revealing the impact of local pH distributions during in-vitro dissolution*, MATERIALS SCIENCE & ENGINEERING C-MATERIALS FOR BIOLOGICAL APPLICATIONS, Volume 60, 402-410, 2016.

DOI: 10.1016/j.msec.2015.11.069

Accession Number: WOS: 000369204700047

Ris140. Bită AI; Stan GE; Niculescu M; Ciuca I; Vasile E; **Antoniac I**; *Adhesion evaluation of different bioceramic coatings on Mg-Ca alloys for biomedical applications*, JOURNAL OF ADHESION SCIENCE AND TECHNOLOGY, Volume 30, Issue 18, 1968-1983, 2016.

DOI: 10.1080/01694243.2016.1171569

Accession Number: WOS: 000375044700004

Ris141. Rau JV; **Antoniac I**; Cama G; Komlev VS; Ravaglioli A; *Bioactive Materials for Bone Tissue Engineering*, BIOMED RESEARCH INTERNATIONAL, 1-3, Article Number 3741428, 2016.

DOI: 10.1155/2016/3741428

Accession Number: WOS: 000369687700001

Ris142. Bită AI, **Antoniac I**, Ciuca I, *Potential use of Mg-Ca alloys for orthopedic applications*, UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN SERIES B-CHEMISTRY AND MATERIALS SCIENCE, Volume 78, Issue 3, 173-184, 2016.

Accession Number: WOS: 000417053200016

Ris143. Bors A; **Antoniac I**; Cotrut C; Antoniac A; Szekely M, *Surface analysis of contemporary aesthetic dental filling materials after storage in erosive solutions*, MATERIALE PLASTICE, Volume 53, Issue 4, 607-611, 2016.

Accession Number: WOS: 000395047100007

Ris144. **Antoniac I**; Bratila E; Munteanu O; Cirstoiu MM; *Design and materials influence on clinical functionality of the cerclage pessary use in prevention of premature birth*, MATERIALE PLASTICE, Volume 53, Issue 4, 612-616, 2016.

Accession Number: WOS: 000395047100008

Ris145. Cirstoiu MM; **Antoniac I**; Ples L; Bratila E; Munteanu O; *Adverse reactions due to use of two intrauterine devices with different action mechanism in a rare clinical case*, MATERIALE PLASTICE, Volume 53, Issue 4, 666-669, 2016.

Accession Number: WOS: 000395047100019

Ris146. Grecu D; **Antoniac I**; Trante O; Niculescu N; Lupescu O; *Failure analysis of retrieved polyethylene insert in total knee replacement*, MATERIALE PLASTICE, Volume 53, Issue 4, 776-780, 2016.

Accession Number: WOS: 000395047100045

Ris147. Oancea R; Bradu A; Sinescu C; Negru RM; Negrutiu ML; **Antoniac IV**; Duma VF; Podoleanu AG; *Assessment of the sealant/tooth interface using optical coherence tomography*, JOURNAL OF ADHESION SCIENCE AND TECHNOLOGY, Volume 29, Issue 01, 49-58, January 2015.

DOI: 10.1080/01694243.2014.974879

Accession Number: WOS: 000344397300005

Ris148. Pariza G; Mavrodin C; **Antoniac I**; *Dependency between the porosity and polymeric structure of biomaterials used in hernia surgery and chronic mesh-infection*, MATERIALE PLASTICE, Volume 52, Issue 4, 484-486, 2015.

Accession Number: WOS: 000368971900013

Ris149. Laptoiu D; Marinescu R; Balan C; **Antoniac I**; *Rheologic properties of some current hyaluronic acid products for viscosupplementation-new trends for amelioration*, MATERIALE PLASTICE, Volume 52, Issue 4, 500-503, 2015.

Accession Number: WOS: 000368971900016

Ris150. Marinescu R; **Antoniac I**; Laptoiu D; Antoniac A; Grecu D; *Complications Related to Biocomposite Screw Fixation in ACL Reconstruction Based on Clinical Experience and Retrieval Analysis*, MATERIALE PLASTICE, Volume 52, Issue 3, 340-344, 2015.

Accession Number: WOS: 000362382300015

Ris151. Corobea MS; Albu G; Ion R; Cimpian A; Miculescu F; **Antoniac I**; Raditoiu V, Sirbu I, Stoenescu M, Voicu S, Ghica V, *Modification of titanium surface with collagen and doxycycline as a new approach in dental implants*, JOURNAL OF ADHESION SCIENCE AND TECHNOLOGY, Volume 29, Issue 23, 2537-2550, 2015.

DOI: 10.1080/01694243.2015.1073661

Accession Number: WOS: 000360620800003

Ris152. Matei AA; Pencea I; Stanciu SG; Hristu R; **Antoniac I**; Ciovisa E; Sfat CE; Stanciu GA; *Structural characterization and adhesion appraisal of TiN and TiCN coatings deposited by CAE-PVD technique on a new carbide*

composite cutting tool, JOURNAL OF ADHESION SCIENCE AND TECHNOLOGY, Volume 29, Issue 23, 2576-2589, 2015.

DOI: 10.1080/01694243.2015.1075857

Accession Number: WOS: 000360620800006

Ris153. Cirstoiu M; Cirstoiu C; **Antoniac I**; Munteanu O; *Levonorgestrel-releasing intrauterine systems: Device design, biomaterials, mechanism of action and surgical technique*, MATERIALE PLASTICE, Volume 52, Issue 2, 258-262, 2015.

Accession Number: WOS: 000357767900028

Ris154. **Antoniac I**; Burcea M; Ionescu RD; Balta F; *IOL's opacification: a complex analysis based on the clinical aspects, biomaterials used and surface characterization of explanted IOL's*, MATERIALE PLASTICE, Volume 52, Issue 1, 109-112, 2015.

Accession Number: WOS: 000351194900027

Ris155. Petreus T; Stoica BA; Petreus O; Goriuc A; Cotrutz CE; **Antoniac IV**; Barbu-Tudoran L; *Preparation and cytocompatibility evaluation for hydrosoluble phosphorous acid-derivatized cellulose as tissue engineering scaffold material*, JOURNAL OF MATERIALS SCIENCE-MATERIALS IN MEDICINE, Volume 25, Issue 4, 1115-1127, 2014.

DOI: 10.1007/s10856-014-5146-z

Accession Number: WOS: 000333093300015

Ris156. Carbonell-Blasco P; Martín-Martínez JM; **Antoniac I**; *Synthesis and characterization of polyurethane sealants containing rosin intended for sealing defect in annulus for disc regeneration*, INTERNATIONAL JOURNAL OF ADHESION AND ADHESIVES, Volume 42, 11-20, 2013.

DOI: 10.1016/j.ijadhadh.2012.11.011

Accession Number: WOS: 000316526900002

Ris157. Mavrodin CI; Pariza G; Ion D; **Antoniac VI**; *Abdominal Compartment Syndrome – A major complication of large incisional hernia surgery*, CHIRURGIA, Volume 108, Issue 3, 414-417, 2013.

Accession Number: WOS:000320694900021

Ris158. **Antoniac I**; Vranceanu MD; Antoniac A; *The influence of the magnesium powder used as reinforcement material on the properties of some collagen based composite biomaterials*, JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS, Volume 15, Issue 7-8, 667-672, 2013.

Accession Number: WOS: 000323397900012

Ris159. Stan F; Dobreă D; Fetecău C; **Antoniac I**; Belea R; *The effect of processing parameters on the bond strength and electrical conductivity of multi-wall carbon nanotube/low-density polyethylene composite*, JOURNAL OF ADHESION SCIENCE AND TECHNOLOGY, Volume 27, Issue 22, 2433-2445, 2013.

DOI: 10.1080/01694243.2013.784859

Accession Number: WOS: 000324611200005

Ris160. Razvan I; **Antoniac I**; *Technological aspects regarding the obtaining of hip prosthesis components using recycled Co-Cr alloys*, METALURGIA INTERNATIONAL, Volume 18, Page 113-117, Special Issue 1, 2023.

Accession Number WOS:000315368200025

Ris161. Vranceanu MD; **Antoniac I**; Miculescu F; Saban R; *The influence of the ceramic phase on the porosity of some biocomposites with collagen matrix used as bone substitutes*, JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS, Volume 14, Issue 7-8, 671-677, 2012.

Accession Number: WOS: 000308718300017

Ris162. Miculescu F; Stan G; Ciocan LT; Miculescu M; Berbecaru A; **Antoniac I**; *Cortical bone as resource for producing biomimetic materials for clinical use*, DIGEST JOURNAL OF NANOMATERIALS AND BIOSTRUCTURES, Volume 7, Issue 4, 1667 – 1677, 2012.

Accession Number: WOS: 000312710300032

Ris163. Reclaru L; Unger RE; Kirkpatrick CJ; Susz C; Eschler PY; Zuercher MH; **Antoniac I**; Lüthy H; *Ni-Cr based dental alloys; Ni release, corrosion and biological evaluation*, MATERIALS SCIENCE AND ENGINEERING C-MATERIALS FOR BIOLOGICAL APPLICATION, Volume 32, Issue 6, 1452-1460, 2012.

DOI: 10.1016/j.msec.2012.04.025

Accession Number: WOS: 000306030900019

Ris164. Sinescu C; Marsavina L; Negrutiu ML; Rusu LC; Ardelean L; Rominu M; **Antoniac I**; Topala FI; Podoleanu A; *New metallic nanoparticles modified adhesive used for time domain optical coherence tomography evaluation of class II direct composite restoration*, REVISTA DE CHIMIE, Volume 63, Issue 4, 380-383, 2012.

Accession Number: WOS: 000304292600008

Ris165. Vranceanu MD; Saban R; **Antoniac I**; Albu M; Miculescu F; *Development and characterization of novel porous collagen based biocomposite for bone tissue regeneration*, UPB SCIENTIFIC BULLETIN, SERIES B: CHEMISTRY AND MATERIALS SCIENCE, Volume 74, Issue 3, 145-156, 2012.

Accession Number WOS:000440235500015

Ris166. Miculescu F; Miculescu M; Ciocan LT; Ernuteanu A; **Antoniac I**; Pencea I; Matei E; *Comparative studies regarding heavy elements concentration in human cortical bone*, DIGEST JOURNAL OF NANOMATERIALS AND BIOSTRUCTURES, Volume 6, Issue 3, 1117-1127, 2011.

Accession Number: WOS: 000297986100026

Ris167. Stancu IC; Dragusin DM; Vasile E; Trusca R; **Antoniac I**; Vasilescu DS; *Porous calcium alginate-gelatin interpenetrated matrix and its biomineralization potential*, JOURNAL OF MATERIALS SCIENCE: MATERIALS IN MEDICINE, Volume 22, Issue 3, 451-460, 2011.

DOI: 10.1007/s10856-011-4233-7

Accession Number: WOS: 00289302600003

Ris168. Rusen E; Mocanu A; Marculescu B; Somoghi R; Butac L; Miculescu F; Cotrut C; **Antoniac I**; Cincu C; *Obtaining complex structures starting from monodisperse poly(styrene-co-2-hydroxyethylmethacrylate) spheres*, COLLOIDS AND SURFACES A: PHYSICOCHEMICAL AND ENGINEERING ASPECTS, Volume 375, Issue 1-3, 35-41, 2011.

DOI: 10.1016/j.colsurfa.2010.11.034

Accession Number: WOS: 000287285500005

Ris169. Miculescu F; Jepu I; Lungu CP; Miculescu M; **Antoniac I**; Tarcolea M; Branzei M; *Correlation between simulation and microanalytical experiment in multilayer nanostructures type analysis*, UPB SCIENTIFIC BULLETIN, SERIES A: APPLIED MATHEMATICS AND PHYSICS, Volume 73, Issue 4, 153-166, 2011.

Accession Number: WOS: 000299150300013

Ris170. Miculescu F; **Antoniac I**; Ciocan LT; Miculescu M; Branzei M; Ernuteanu A; Batalu D; Berbecaru A; *Complex analysis on heat-treated human compact bones*, UPB SCIENTIFIC BULLETIN, SERIES B: CHEMISTRY AND MATERIALS SCIENCE, Volume 73, Issue 4, 203-212, 2011.

Accession Number WOS:000440229700022

Ris171. Zecheru T; Rotariu T; Rusen E; Marculescu B; Miculescu F; Alexandrescu L; **Antoniac I**; Stancu IC; *Poly(2-hydroxyethyl methacrylate-co-dodecyl methacrylate-co-acrylic acid): synthesis, physico-chemical characterisation and nafcillin carrier*, JOURNAL OF MATERIALS SCIENCE: MATERIALS IN MEDICINE, Volume 21, Issue 10, 2793-2804, 2010.

DOI: 10.1007/s10856-010-4129-y

Accession Number WOS:000283371200009

Ris172. Titorencu I; Albu MG; Giurginca M; Jinga V; **Antoniac I**; Trandafir V; Cotrut C; Miculescu F; Simionescu M; *In vitro biocompatibility of human endothelial cells with collagen-doxycycline matrices*, MOLECULAR CRYSTALS AND LIQUID CRYSTALS, Volume 523, 82-96, 2010.

DOI: 10.1080/15421401003724126

Accession Number WOS: 000278163400007

Ris173. Botez P; Sirbu P; Simion L; Munteanu F; **Antoniac I**; *Application of a biphasic macroporous synthetic bone substitutes CERAFORM®: clinical and histological results*, EUROPEAN JOURNAL OF ORTHOPAEDIC SURGERY & TRAUMATOLOGY, Volume 19, Issue 6, 387–395, 2009.

DOI: 10.1007/s00590-009-0445-7

Accession Number WOS: 000268777200002

Ris174. Miculescu F; Bojin D; Ciocan LT; **Antoniac I**; Miculescu M; Miculescu N; *Experimental researches on biomaterial-tissue interface interactions*, JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS, Volume 9, Issue 11, 3303 – 3306, 2007.

Accession Number: WOS: 000251435200002

Ris175. Laurian T; Tudor A; **Antoniac I**; Miculescu F; *A micro-scale abrasion test to study the influence of counterface roughness on the wear resistance of UHMWPE*, JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS, Volume 9, Issue 11, 3383 – 3388, 2007.

Accession Number: WOS: 000251435200021

Risb - Reviste de specialitate de circulatie internationala recunoscute (indexate in alte Baze de Date Internationale – BDI specifice domeniului, care fac un proces de selectie a revistelor pe baza unor criterii de performanta).

Risb1. Adam R; Gheorghiu N; Orban H; **Antoniac I**; Barbilian A; *Evolution toward new bioabsorbable material for osteosynthesis implants used in foot and ankle surgery*, ARCHIVES OF THE BALKAN MEDICAL UNION, Volume 51, Issue 2, 190-198, 2016.

Document Type: Review

Indexat SCOPUS

Risb2. Sionkowska A; Kaczmarek B; Trokowska P; **Antoniac I**; *Properties and characterization of chitosan/collagen/PMMA composites containing hydroxyapatite*, KEY ENGINEERING MATERIALS, Volume 672, 247-256, 2015.

DOI: 10.4028/www.scientific.net/KEM.672.247

Document Type: Article.

Indexat SCOPUS

Risb3. Antoniac I; Lesci G; Blajan A; Vitioanu G; Antoniac A; *Bioceramics and biocomposites from marine sources*, KEY ENGINEERING MATERIALS, Volume 672, 276-292, 2015.

DOI: 10.4028/www.scientific.net/KEM.672.276

Document Type: Article.

Indexat SCOPUS

Risb4. Vranceanu M.D; Saban R; Albu M.G; **Antoniac I;** *Preparation and characterization of collagen: Amorphous calcium phosphate composites*, LEATHER AND FOOTWEAR JOURNAL, Volume 12, Issue 3, 215-222, 2012.

Document Type: Article.

Indexat SCOPUS

Risb5. Vranceanu MD; Saban R; Albu MG; **Antoniac I;** *Preparation and characterization of collagen: amorphous calcium phosphate composites (Prepararea si caracterizarea compozitelor collagen: fosfat de calciu amorf)*, LEATHER AND FOOTWEAR JOURNAL, Volume 12, Issue 3, 215-222, 2012.

Document Type: Article.

Indexat SCOPUS

Risb6. Atasiei T; **Antoniac I;** Laptoiu D; *Failure causes in hip resurfacing arthroplasty - Retrieval analysis*, INTERNATIONAL JOURNAL OF NANO AND BIOMATERIALS, Volume 3, Issue 4, 367-381, 2011.

DOI: 10.1504/IJNBM.2011.045882

Document Type: Article.

Indexat SCOPUS

Rio – Alte reviste de specialitate de circulatie internationala.

Rio1. Laptoiu DC; **Antoniac I;** Antoniac A; *Testing the effect of permanent magnets on magnetic nanoparticles ferrofluid - Targeted delivery inside knee articulation*, Annals of DAAAM and Proceedings of the International DAAAM Symposium, 937-938, 2011.

Document Type: Conference Paper, ISSN 17269679

Rio2. Laptoiu DC; **Antoniac I;** Cotrut C; *Optimisation of magnets positions on the knee joint using comsol multiphysics*, Annals of DAAAM and Proceedings of the International DAAAM Symposium, 935-936, 2011.

Document Type: Conference Paper, ISSN 17269679

Rio3. Diana V; **Antoniac I;** Laptoiu D; Corobea C; Stefanescu I; *Functionalized magnetic nanoparticles used for drug delivery in knee injuries*, EUROPEAN CELLS AND MATERIALS, Vol. 20, Suppl. 1, 49, 2010.

Document Type: Conference Paper, ISSN 1473-2262

Rio4. Vranceanu DM; Cotrut CM; **Antoniac I;** *Corrosion resistance of Zr based coatings for medical applications*, EUROPEAN CELLS AND MATERIALS, Vol. 20, Suppl. 1, 50, 2010.

Document Type: Conference Paper, ISSN 1473-2262.

Rio5. Stefanescu I; Bojin D; **Antoniac I;** *Deposition of composite layers made from hydroxyapatite and silver nanoparticles*, EUROPEAN CELLS AND MATERIALS, Vol. 20, Suppl. 1, 43, 2010.

Document Type: Conference Paper, ISSN 1473-2262

Rio6. Popescu D; Parpala RC; Laptoiu DC; **Antoniac I;** *Computer-aided technique for determining spinal pedicle screw size and optimal insertion trajectory*, Annals of DAAAM and Proceedings of the International DAAAM Symposium, 527-528, 2010.

Document Type: Conference Paper, ISSN 17269679

Rio7. Cotrut CM; Zoita CN; Kiss A; Braic M; Balaceanu M; Braic V; Vladescu A; **Antoniac I;** *Structural, mechanical and anti-corrosive properties of biocompatible Zr/ZrCN coatings*, EUROPEAN CELLS AND MATERIALS, Vol. 16, Suppl. 1, 30, 2008.

Document Type: Conference Paper, ISSN 1473-2262

Rio8. Ionela S; **Antoniac I;** Laptoiu D; Negrusoiu M; Antoniac P; Istrate R; *Combined mechanical and corrosion failure mechanism of a tumoral reconstruction hip prosthesis: a case report with SEM evaluation*, EUROPEAN CELLS AND MATERIALS, Vol. 16, Suppl. 1, 54, 2008.

Document Type: Conference Paper, ISSN 1473-2262.

Rio9. **Antoniac I;** Laptoiu D; Miculescu F; Istrate R; Trisca-Rusu C; *Microscopy analysis of total knee prosthesis failure caused by polyethylene wear*, EUROPEAN CELLS AND MATERIALS, Vol. 16, Suppl. 1, 54, 2008.

Document Type: Conference Paper, ISSN 1473-2262.

Rio10. Cotrut CM; Vladescu A; **Antoniac I;** Kiss A; Zamfir R; Zoita CN; Braic M; Braic V; *Corrosion resistance of the biocompatible nitride and carbide thin films*, EUROPEAN CELLS AND MATERIALS, Vol. 13, Suppl. 3, 34, 2007.

Document Type: Conference Paper, ISSN 1473-2262.

Rio11. **Antoniac I;** Sajin M; Miculescu F; Antoniac P; Ciurea M; *Adhesion formation in response to some biodegradable*

structures used in mesh repair of abdominal wall hernia, EUROPEAN CELLS & MATERIALS JOURNAL, Vol. 13, Suppl. 3, 31, 2007.

Document Type: Conference Paper, ISSN 1473-2262.

Rio12. Petrut A; Ivanov A; **Antoniac I**; Miculescu F; Cosmeleata G; *Experimental researches about technological and microstructural aspects in the case of cobalt-chromium dental alloys*, EUROPEAN CELLS & MATERIALS JOURNAL, Vol. 13, Suppl. 3, 28, 2007.

Document Type: Conference Paper, ISSN 1473-2262.

Rno - Reviste de specialitate de circulatie nationala recunoscute de CNCSIS. Se mentioneaza Categoria CNCSIS.

Rno1. **Antoniac I**; *Trends in dental biomaterials surface modification*, CLUJUL MEDICAL - JOURNAL OF MEDICINE AND PHARMACY, Supplement No. 1, Volume 88, B+ category Journal; CNCSIS code 253, no. 94, ISSN 1222-2119, 2015.

Rno2. Bors A; Szekely M; Molnar-Varlam C; Ponta O; **Antoniac I**; *Effect of erosive conditions on aesthetic dental filling materials – in vitro study*, CLUJUL MEDICAL - JOURNAL OF MEDICINE AND PHARMACY, Supplement No. 1, Volume 88, B+ category Journal; CNCSIS code 253, no. 94, ISSN 1222-2119, 2015.

Rno3. **Antoniac V**; Laptoiu D; *Magnesium Alloys – current orthopedic applications*, REVISTA DE ORTOPEDIE SI TRAUMATOLOGIE ASORIS, Volume 4, Issue 20, Categoria CNCSIS – B, ISSN 1454-6213, 2010.

Vis- Volumele unor manifestari stiintifice internationale recunoscute, organizate in tara si strainatate, indexate ISI Thomson Reuters.

Vis1. Ionescu R; Mardare M; Dorobantu A; Vermesan S; Marinescu E; Saban R; **Antoniac I**; Ciocan DN; Ceausu M; *Correlation between materials, design and clinical issues in the case of associated use of different stainless steels as implant materials*, KEY ENGINEERING MATERIALS, Volume 583, 41-44, 2014.

DOI: 10.4028/www.scientific.net/KEM.583.41

Accession Number: WOS: 000336552600008

Document Type: Proceedings Paper

Vis2. Voicu SI; **Antoniac I**; Naftanaila L; Nechifor G; *The functionalization of remaining solvent in polymeric membrane pores for biomedical applications*, KEY ENGINEERING MATERIALS, Volume 583, 87-90, 2014.

DOI: 10.4028/www.scientific.net/KEM.583.87

Accession Number: WOS: 000336552600014

Document Type: Proceedings Paper

Vis3. Miculescu F; Pencea I; Miculescu M; **Antoniac I**; Ciocan LT; Ernuteanu A; *Energy dispersive techniques using X-ray fluorescence with primary X-rays for human hard tissues analysis*, KEY ENGINEERING MATERIALS, Volume 583, 129-133, 2014.

DOI: 10.4028/www.scientific.net/KEM.583.129

Accession Number: WOS: 000336552600022

Document Type: Proceedings Paper

Vis4. Marinescu R; Laptoiu D; **Antoniac I**; Petcu C; *Development of modified viscoelastic solution with magnetic nanoparticles - potential method for targeted treatment of chondral injuries*, KEY ENGINEERING MATERIALS, Volume 583, 145-149, 2014.

DOI: 10.4028/www.scientific.net/KEM.583.145

Accession Number: WOS: 000336552600024

Document Type: Proceedings Paper

Vis5. Cosmin B; **Iulian A**; Florin M; Marius D; Ionel D; *Investigation of a mechanical valve impairment after eight years of implantation*, KEY ENGINEERING MATERIALS, Volume 583, 137-144, 2014.

DOI: 10.4028/www.scientific.net/KEM.583.137

Accession Number: WOS: 000336552600023

Document Type: Proceedings Paper

Vis6. Carbonell-Blasco P; **Antoniac IV**; Martin-Martinez JM; *New polyurethane sealants containing rosin for non-invasive disc regeneration surgery*, KEY ENGINEERING MATERIALS, Volume 583, 67-79, 2014.

DOI: 10.4028/www.scientific.net/KEM.583.67

Accession Number: WOS:000336552600012

Document Type: Proceedings Paper

Vis7. Ionescu R; Cristescu I; Dinu M; Saban R; **Antoniac I**; Vilcioiu D; *Clinical, biomechanical and biomaterials approach in the case of fracture repair using different systems type plate-screw*, KEY ENGINEERING MATERIALS, Volume 583, 150-154, 2014.

DOI: 10.4028/www.scientific.net/KEM.583.150

Accession Number: WOS: 000336552600025

Document Type: Proceedings Paper

Vis8. Cotrut CM; Ciuca S; Miculescu F; **Antoniac I**; Tarcolea M; Vranceanu DM; *The influence of classical and modern manufacturing technologies on the properties of metal dental bridges*, KEY ENGINEERING MATERIALS, Volume 583, Pages 163-168, 2014.
DOI: 10.4028/www.scientific.net/KEM.583.163
Accession Number: WOS: 000336552600027
Document Type: Proceedings Paper

Vis9. **Antoniac I**; *Biodegradability of some collagen sponges reinforced with different bioceramics*, KEY ENGINEERING MATERIALS, Volume 587, 179-184, 2014.
DOI: 10.4028/www.scientific.net/KEM.587.179
Accession Number: WOS: 000336185000029
Document Type: Proceedings Paper

Vis10. Manolea H; **Antoniac I**; Florescu N; Marasescu P; Miculescu M; Dascalu IT; *Study of the expansion behaviour of some materials used in the dental metal-ceramic technology*, KEY ENGINEERING MATERIALS, Volume 587, 366-371, 2014.
DOI: 10.4028/www.scientific.net/KEM.587.366
Accession Number: WOS:000336185000061
Document Type: Proceedings Paper

Vis11. Togan V; Ionita G; **Antoniac I**, *Corrosion behavior of Ti6Al4V coated with SiO_x by PECVD technology*, KEY ENGINEERING MATERIALS, Volume 583, 22-27, 2014.
DOI: 10.4028/www.scientific.net/KEM.583.22
Accession Number: WOS:000336552600004
Document Type: Proceedings Paper

Vis12. Carmen BA; Dorin L; Sorin SI; Carmen B; Alexandru B; Eduard B; **Iulian A**; Corneliu M, *New titanium alloys potentially used for metal-ceramic applications in medicine*, KEY ENGINEERING MATERIALS, Volume 587, 287-292, 2014.
DOI: 10.4028/www.scientific.net/KEM.587.287
Accession Number: WOS:000336185000047
Document Type: Proceedings Paper

Vis13. Marius N; **Iulian A**; Ana B, *Metallic biomaterials processing technologies in order to obtain a new design for a hip prosthesis femoral component*, ADVANCED MATERIALS AND STRUCTURES V, Volume 216, 239-242, 2014.
DOI: 10.4028/www.scientific.net/SSP.216.239
Accession Number: WOS: 000347924100041
Document Type: Proceedings Paper

Vis14. Miculescu F; Ciocan LT; Miculescu M; Ernuteanu A; **Antoniac I**; Matei E; Pencea I; *A study on trace elements concentration in bone particles by XRF analysis*, SOLID STATE PHENOMENA, Volume 188, 37-40, 2012.
DOI: 10.4028/www.scientific.net/SSP.188.37
Accession Number: WOS: 000308047400007
Document Type: Proceedings Paper

Vis15. **Antoniac I**; Miculescu M; Dinu M; *Metallurgical characterization of some magnesium alloys for medical applications*, SOLID STATE PHENOMENA, Volume 188, 109-113, 2012.
DOI: 10.4028/www.scientific.net/SSP.188.109
Accession Number: WOS: 000308047400020
Document Type: Proceedings Paper

Vis16. Bane M; Miculescu F; Blajan AI; Dinu M; **Antoniac I**; *Failure analysis of some retrieved orthopedic implants based on materials characterization*, SOLID STATE PHENOMENA, Volume 188, 114-117, 2012.
DOI: 10.4028/www.scientific.net/SSP.188.114
Accession Number: WOS: 000308047400021
Document Type: Proceedings Paper

Vis17. Alexandru G; Brandusa G; Maria BC; Nicolae G; **Iulian A**; *Heat Treatments Influence on Corrosion Resistance of Some New Dental Cobalt Alloys*, SOLID STATE PHENOMENA, Volume 188, 93-97, 2012.
DOI: 10.4028/www.scientific.net/SSP.188.93
Accession Number: WOS:000308047400017
Document Type: Proceedings Paper

Vis18. Mihaela MA; Brandusa G; Nicolae G; **Iulian A**; *Corrosion Behaviour in Ringer Solution of Ti-Mo Alloys used for Orthopaedic Biomedical Applications*, SOLID STATE PHENOMENA, Volume 188, 98-101, 2012.
DOI: 10.4028/www.scientific.net/SSP.188.98
Accession Number: WOS:000308047400018
Document Type: Proceedings Paper

Vis19. Antoniac I; Dinu M; *Microstructural and mechanical features of Mg-Ca alloys*, 2011 E-HEALTH AND BIOENGINEERING CONFERENCE, EHB 2011, Article number 6150355, 2011.

Accession Number: WOS: 000304806300047

Document Type: Proceedings Paper

Vis20. Antoniac I; Vranceanu MD; Antoniac A; Albu MG; *The influence of the ceramic phase on the structure of resorbable biocomposites based on collagen*, 2011 E-HEALTH AND BIOENGINEERING CONFERENCE, EHB 2011, Article number 6150354, 2011.

Accession Number: WOS: 000304806300046

Document Type: Proceedings Paper

Vis21. Sinescu C; Negrutiu M; Pop D; Cuc L; DeSabata A; Negru R; Hluscu M; Rominu M; Marcauteanu C; Demjan E; Bradu A; **Antoniac I;** Dobre G; Podoleanu A, *The importance of holograms in dentistry*, HOLOGRAPHY: ADVANCES AND MODERN TRENDS, Volume 7358, Article Number 73580J, 2009.

DOI: 10.1117/12.821545

Accession Number: WOS: 000300009800015

Document Type: Proceedings Paper

Visb- Volumele unor manifestari stiintifice internationale recunoscute, organizate in tara si strainatate indexate in alte Baze de Date Internationale - BDI specifice domeniului, care fac un proces de selectie a publicatiilor pe baza unor criterii de performanta.

Visb1. Lupescu O; Nagea M; Dimitriu AL; **Antoniac IV;** *Bioactive glasses in treating bone infections*, KEY ENGINEERING MATERIALS, Volume 758, 245-249, 2017.

DOI: 10.4028/www.scientific.net/KEM.758.245.

Document Type: Conference Paper.

Indexat SCOPUS

Visb2. Neaga M; Lupescu O; Popescu G.I; **Antoniac IV;** *Algorithms for clinical indications of bone substitutes-component of training in orthopaedic surgery*, KEY ENGINEERING MATERIALS, Volume 758, 217-222, 2017.

DOI: 10.4028/www.scientific.net/KEM.758.217

Document Type: Conference Paper.

Indexat SCOPUS

Visb3. Adam R; Orban H; Dragomir L; Milea C; **Antoniac I;** Barbilian A; *Investigation of biodegradation behavior of an Mg-1Ca alloy during in vivo testing*, KEY ENGINEERING MATERIALS, Volume 752, 87-92, 2017.

DOI: 10.4028/www.scientific.net/KEM.752.87

Document Type: Conference Paper.

Indexat SCOPUS

Visb4. Alexandru-Titus F; **Iulian A;** Aurora A; Catalina F; *SEM evaluation of denture base materials used in clinical practice*, KEY ENGINEERING MATERIALS, Volume 695, 91-95, 2016.

DOI: 10.4028/www.scientific.net/KEM.695.91

Document Type: Conference Paper.

Indexat SCOPUS

Visb5. Bitu A-I; Semenescu A; Antoniac A; **Antoniac I;** *Hydrogen evolution analyzed on various magnesium alloys*, KEY ENGINEERING MATERIALS, Volume 695, 152-156, 2016.

DOI: 10.4028/www.scientific.net/KEM.695.152

Document Type: Conference Paper.

Indexat SCOPUS

Visb6. Marinescu R; Laptoiu D; Socoliuc C; **Antoniac I;** *Pretibial cyst formation in ACL reconstruction - A case report*, KEY ENGINEERING MATERIALS, Volume 695, 111-117, 2016.

DOI: 10.4028/www.scientific.net/KEM.695.111

Document Type: Conference Paper.

Indexat SCOPUS

Visb7. Bors A; Szekely M; Molnar-Varlam C; **Antoniac I;** *Bioactivity of retrograde dental root filling materials*, KEY ENGINEERING MATERIALS, Volume 695, 236-242, 2016.

DOI: 10.4028/www.scientific.net/KEM.695.236

Document Type: Conference Paper.

Indexat SCOPUS

Visb8. Ghiban B; **Antoniac I;** Gheorghe D; Ghiban A; Ene R; *Metallurgical failure analysis of intramedullary nail used for femoral fracture stabilization*, KEY ENGINEERING MATERIALS, Volume 695, 178-182, 2016.

DOI: 10.4028/www.scientific.net/KEM.695.178

Document Type: Conference Paper.

Indexat SCOPUS

- Visb9.** Cristescu I; Angheluta C; Safta F; Vilcioiu D; Gjoni A; Istodorescu M; **Antoniac I**; *The outcome of tricalcium phosphate wedges used in opening high tibial osteotomy*, KEY ENGINEERING MATERIALS, Volume 695, 139-143, 2016.
DOI: 10.4028/www.scientific.net/KEM.695.139
Document Type: Conference Paper.
Indexat SCOPUS
- Visb10.** Ene R; Panti Z; Nica M; Pleniceanu M; Ene P; Cirstoiu M; **Antoniac I**; Cirstoiu C; *Mechanical failure of angle locking plates in distal comminuted tibial fractures*, KEY ENGINEERING MATERIALS, Volume 695, 118-122, 2016.
DOI: 10.4028/www.scientific.net/KEM.695.118
Document Type: Conference Paper.
Indexat SCOPUS
- Visb11.** Barbinta AC; Luca D; Strugaru I.S; Biniuc C; Barca A; Barca E; **Antoniac I**; Munteanu C; *New titanium alloys potentially used for metal-ceramic applications in medicine*, KEY ENGINEERING MATERIALS, Volume 587, 287-292, 2014.
DOI: 10.4028/www.scientific.net/KEM.587.287
Document Type: Conference Paper.
Indexat SCOPUS
- Visb12.** Miculescu M; Bane M; Miculescu F; Ciocan LT; Preda Oana; **Antoniac I**; *A study on metal-ceramic interface on metal base dental alloys*, KEY ENGINEERING MATERIALS, Volume 638, 14-19, 2014.
DOI: 10.4028/www.scientific.net/KEM.638.14
Document Type: Conference Paper.
Indexat SCOPUS
- Visb13.** Dinu M; Braic M; Tarcolea M; Vladescu A; **Antoniac I**; Cotrut CM; *Corrosion behavior of TiSiN coatings deposited on Ni-Cr alloy in artificial saliva with and without fluoride*, KEY ENGINEERING MATERIALS, Volume 638, 47-53, 2014.
DOI: 10.4028/www.scientific.net/KEM.638.47
Document Type: Conference Paper.
Indexat SCOPUS
- Visb14.** Crimu CI; Istrate B; Munteanu C; **Antoniac I**; Matei MN; Earar K; *XRD and Microstructural analyses on biodegradable Mg alloys*, KEY ENGINEERING MATERIALS, Volume 638, 79-84, 2014.
DOI: 10.4028/www.scientific.net/KEM.638.79
Document Type: Conference Paper.
Indexat SCOPUS
- Visb15.** Cirstoiu M; Cirstoiu C; **Antoniac I**; Munteanu O; *Bleeding Disorders – A Frequent Complication Related to the Use of Intrauterine Device with Low Dose Hormonal Mechanism of Action*, KEY ENGINEERING MATERIALS, ISSN: 1662-9795, Volume 638, 216-221, 2014.
DOI: 10.4028/www.scientific.net/KEM.638.79
Document Type: Conference Paper
Indexat SCOPUS
- Visb16.** Bors A; Székely M; Ponta O; **Antoniac I**; *erosion effects on morphology and chemical composition of direct dental restoratives*, KEY ENGINEERING MATERIALS, Volume 638, 286-295, 2014.
DOI: 10.4028/www.scientific.net/KEM.638.286
Document Type: Conference Paper.
Indexat SCOPUS
- Visb17.** Blajan AI; Miculescu F; Ciuca I; Cotrut C; Semenescu A; **Antoniac I**; *Effect of calcium content on the microstructure and degradation of Mg-Ca binary alloys potentially used as orthopedic biomaterials*, KEY ENGINEERING MATERIALS, Volume 638, 104-108, 2014.
DOI: 10.4028/www.scientific.net/KEM.638.104
Document Type: Conference Paper.
Indexat SCOPUS
- Visb18.** Miculescu F; Ciocan LT; Miculescu M; **Antoniac I**; Purcaru A; Preda O; Maidaniuc A; *Cooling conditions influence on cortical bovine bones derived hydroxyapatite*, KEY ENGINEERING MATERIALS, Volume 638, 111-116, 2014.
DOI: 10.4028/www.scientific.net/KEM.638.111
Document Type: Conference Paper.
Indexat SCOPUS
- Visb19.** Cristescu I; **Antoniac I**; Vilcioiu D; Safta F; *Analysis of centromedullary nailing with implant failure*, KEY ENGINEERING MATERIALS, Volume 638, 130-134, 2014.
DOI: 10.4028/www.scientific.net/KEM.638.130

Document Type: Conference Paper.

Indexat SCOPUS

Visb20. Adam R; Orban C; Gheorghiu N; Orban H; **Antoniac I**; *Bisphosphonates vs. atypical femur fractures - influence on bone resorption*, KEY ENGINEERING MATERIALS, Volume 638, 296-300, 2014.

DOI: 10.4028/www.scientific.net/KEM.638.296

Document Type: Conference Paper.

Indexat SCOPUS

Visb21. Voicu SI; Muhulet A; **Antoniac IV**; Corobea MS; *Cellulose derivatives based membranes for biomedical applications*, KEY ENGINEERING MATERIALS, Volume 638, 27-30, 2014.

DOI: 10.4028/www.scientific.net/KEM.638.27

Document Type: Conference Paper.

Indexat SCOPUS

Visb22. Niculescu M; Laptoiu D; Miculescu F; **Antoniac I**; *Biomaterials view on the complications associated with hip resurfacing arthroplasty*, ADVANCED MATERIALS RESEARCH, Volume 1114, 247-252, 2014.

DOI: 10.4028/www.scientific.net/AMR.1114.247

Document Type: Conference Paper.

Indexat SCOPUS

Visb23. Weshler M; Antoniac A; Cojocaru D; **Antoniac I**; *In vitro assessment of a new proposed biomaterial and dental implant abutments understatic load*, ADVANCED MATERIALS RESEARCH, Volume 1114, 266-271, 2014.

DOI: 10.4028/www.scientific.net/AMR.1114.266

Document Type: Conference Paper

Indexat SCOPUS

Visb24. Niculescu M; Laptoiu D; Miculescu F; **Antoniac I**; *Metal allergy and other adverse reactions in patients with total hip replacement*, ADVANCED MATERIALS RESEARCH, Volume 1114, 283-287, 2014.

DOI:10.4028/www.scientific.net/AMR.1114.283

Document Type: Conference Paper.

Indexat SCOPUS

Visb25. Pariza G; Mavrodin CI; Gangone ME; **Antoniac I**; *Choosing the biomaterials for hernia mesh fixation in correlation with surgical procedure*, ADVANCED MATERIALS RESEARCH, Volume 1114, 253-257, 2014.

DOI: 10.4028/www.scientific.net/AMR.1114.253

Document Type: Conference Paper.

Indexat SCOPUS

Visb26. Mavrodin CI; **Antoniac I**; Pariza G; *Relationship between biomaterials structure used in hernia mesh fixation and chronic infection*, ADVANCED MATERIALS RESEARCH, Volume 1114, 278-282, 2014.

DOI: 10.4028/www.scientific.net/AMR.1114.278

Document Type: Conference Paper.

Indexat SCOPUS

Visb27. Niculescu M; **Antoniac I**; Blajan A; *Metallic biomaterials processing technologies in order to obtain a new design for a hip prosthesis femoral component*, SOLID STATE PHENOMENA, Volume 216, 239-242, 2014.

DOI: 10.4028/www.scientific.net/SSP.216.239

Document Type: Conference Paper.

Indexat SCOPUS

Visb28. Razvan I; **Iulian A**; Cosmin C; Florin M; Eugeniu V; Munteanu C; Moldan D; Marius N; *Potential solutions to increase the corrosion resistance of metallic surgical instruments using different types of ceramic coatings*, KEY ENGINEERING MATERIALS, Volume 614, 206-211, 2014.

DOI: 10.4028/www.scientific.net/KEM.614.206

Document Type: Conference Paper.

Indexat SCOPUS

Visb29. Istrate B; Munteanu C; Luca D; Kamel E; Sebastian BE; **Antoniac I**; *Tribological tests and SEM analysis for titanium oxide layers*, KEY ENGINEERING MATERIALS, Volume 614, 74-79, 2014.

DOI: 10.4028/www.scientific.net/KEM.614.74

Document Type: Conference Paper.

Indexat SCOPUS

Visb30. Crimu C; **Antoniac I**; Focsaneanu S; Cristea DP; Istrate B; Munteanu C; Earar K; *The study of microstructure of the Mgca alloys in their use in biodegradable orthopedic implants*, ADVANCED MATERIALS RESEARCH, Volume 1036, 207-211, 2014.

DOI: 10.4028/www.scientific.net/AMR.1036.207

Document Type: Conference Paper.

Indexat SCOPUS

Vi - Volumele unor manifestari stiintifice internationale recunoscute, organizate in tara si strainatate;

Vi1. Antoniac I; Vranceanu D; *Absorption and degradation characteristics of collagen-based composites reinforced with magnesium and bioceramic powders*, Conference Proceeding, International Conference of the Riga Technical University, INTERNATIONAL SYMPOSIUM ON BIOMEDICAL ENGINEERING AND MEDICAL PHYSICS - ISBEMP, 10-12 octombrie, Riga, Letonia, 2012.

Vi2. Antoniac I; Dinu M; *Investigation of degradation behavior of Mg-1Ca alloy for biomedical application in different simulated biological medium*, Conference Proceeding, International Conference of the Riga Technical University, INTERNATIONAL SYMPOSIUM ON BIOMEDICAL ENGINEERING AND MEDICAL PHYSICS - ISBEMP, 10-12 octombrie, Riga, Letonia, 2012.

Vi3. Bunea D; Antoniac V; Trante O; Trante D; Trante C; *Studies and research on the austenitic stainless steels casting and/or forging in order to provide the conditions for using like biomaterials*, MATERIALS FOR MEDICAL ENGINEERING, Ed. Wiley-VCH, ISBN 3-527-30123-2, pag. 86-92, Weinheim, 2000.

Vi4. Bunea D; Antoniac V; Bunea Z; *Experimental research on the metallografical structure analysis and his influence from the austenitic stainless steel orthopaedic implants, obtain over in vacuum precision casting*, JOURNAL OF THE INTERNATIONAL FEDERATION FOR MEDICAL&BIOLOGICAL ENGINEERING, Vol. 37, Suppl. 2, part I, 212, 1999, ISSN 0140-0118.

Vn - Volumele unor manifestari stiintifice nationale.

Vn1. Miculescu F; Bunea D; Antoniac IV; Bojin D; Miculescu M; *Caracterizarea Biomaterialelor Utilizand Microscopia Electronica ESEM*, Volum lucrari, Simpozionul National cu participare Internationala "BIOMATERIALE – prezent si perspective Editia a III-a" – Bucuresti, pag. 271-277, Editura Printech, ISBN 973-652-808-3, 2003.

Vn2. Antoniac IV; Laptoiu D; Miculescu F; Branzei M; Miculescu M; *Investigatii privind interactiunea tesut –implant in cazul unei componente protetice acetabulare explantate tip necimentat*, Volum lucrari, Simpozionul National cu participare Internationala "BIOMATERIALE – prezent si perspective Editia a III-a" – Bucuresti, pag.463-469, Editura Printech, ISBN 973-652-808-3, 2003.

V. BREVETE DE INVENTIE / INOVATII (B, A)

B - Brevete de inventie.

B1. Antoniac VI; Voicu IS; Costoiu MC; Antoniac AM; Mates IM, Streza A; Semenescu A; *Composite coating for controlling the biodegradation of medical magnesium alloys*, OSIM CBI A 2023 – 00746/ 27 nov. 2023.

B2. Antoniac VI; Rau J; Semenescu A; Dawod N; Geantă V; Voiculescu I; Mateș IM; Șolea MR; *Co-Cr type dental alloy with corrosion resistance and high biocompatibility*, OSIM Patent RO134131B1/ 29.09.2023 (BOPI nr.9/2023).

B3. Antoniac VI; Rau J; Semenescu A; Dawod N; Geantă V; Voiculescu I; Mateș IM; Șolea MR; *Co-Cr type alloy alloyed with ruthenium, for metal-ceramic dental prostheses*, OSIM Patent RO134132B1 /29.09.2023 (BOPI nr.9/2023).

B4. Antoniac I; Mohan AG; Semenescu A; Doicin CV; Ulmeanu ME; Costoiu MC; Cavalu S; Murzac R; Doicin IE; Saceleanu MV; Mates IM; *Cranial implant with osseointegration structures and functional coating*, OSIM Patent 132417/2019.

B5. Antoniac I; Semenescu A; Orban HB; Adam R; Mates IM; *Multimaterial rod for external fixation device*; OSIM Patent 131543/2019.
cannulated screw for ligament fixation; OSIM Patent 128477/2015.

B6. Popescu D; Amza CG; Laptoiu DC; Amza G; Semenescu A; **Antoniac I;** Cicic DT; *Method and intelligent system based on X rays for training surgeons in inserting pedicle screws*, OSIM Patent 128174/2015.

B7. Moldovan M; Musat O; **Antoniac VI;** Prejmerean C; Trif M; Sarosi C; Boboia S; Silaghi-Dumitrescu L; *Biomimetic biodegradable composition meant for osseous implants*, OSIM Patent RO127484-A2/2012.

B8. Alionte CG; Alupeii COD; **Antoniac VI;** Ghiban B; Ghiban N; Hadar A; Ionescu LV; Laptoiu DC; Marin A; Semenescu A; *Orthopedical screw rod and process for increasing bio-compatibility*, OSIM Patent RO125357-A0/2010.

B9. Bunea D; Orban G; Moldovan L; **Antoniac VI;** Gheorghiu D; Semenescu A; *Femoral component for total hip prosthesis*, OSIM Patent 117890B/2002.

B10. Semenescu A; Bunea D; Ranea C; **Antoniac I;** *Discontinuous regenerative firing plant*; OSIM Patent 117972/2002.

VI. CONTRACTE SI RAPOARTE STIINTIFICE (P, F)

P – Proiecte de cercetare-dezvoltare – inovare obtinute prin competitie, pe baza de contract/grant, in tara/strainatate (Pi –internationale, Pn – nationale).

Pi – Proiecte internationale de cercetare-dezvoltare-inovare obtinute prin competitie, pe baza de contract/grant la care am fost director de proiect / responsabil al partenerului.

Pi1. Investigation Physico-chimique, Mécanique et Biologique des Biomateriaux Céramiques: Développement de Biocapteurs pour des Applications Médicales- ASBiomat, Finantator: L'Agence Universitaire de la Francophonie, **Director de proiect** (2022-2023).

Pi2. Delivering Nanotechnologies, Advanced Materials and Production to REgional Manufacturing, Program Interreg Europe, Cod proiect PGI00023 -NMP-REG, **Director proiect UPB** (2016-2021).
Pi3. Biogenic Inks combining marine collagen and ionic-doped calcium phosphate for bone tissue engineering, Program Cadru 7 – PC7, Schema ERA-NET, Contract 70/2017, **Director proiect UPB** (2017-2020).
Pi4. Novel biofunctional polymer scaffolds and techniques for the regeneration and repair of degenerate intervertebral disc, FP7-NMP-2007-LARGE-1, Proiect nr. 293104: Acronym - Disc Regeneration, **Director proiect UPB** (2008-2012).

Pic - Proiecte internationale de cercetare-dezvoltare-inovare obtinute prin competitie, pe baza de contract/grant la care am fost membru in colectivul de lucru.

Pic1. Contract SEE 6/2016 - *Exploring materials structure when interacting with geothermal steam for producing renewable energy*, Director de proiect: Ioana Csaki, (2016-2017).
Pic2. Program de colaborare bilaterala Romania-Bulgaria, *Investigation of the hydrogen diffusion, permeability and solubility in titanium and titanium based alloys intended for application aero-space industry*, Institute of Metal Science – Bulgarian Academy of Sciences; Director de proiect: Buzatu Mihai, (2010-2012).
Pic3. CMST COST Action TD0903 - *Understanding and manipulating enzymatic and proteomic processes in biomineralization - towards new biomimetic strategies, the creation of tailored nano-scale architectures and environmental monitoring*; Responsabil pentru Romania - Management Committee Member; 2009-2013.
Pic4. MPNS COST Action MP1005 - *From nano to macro biomaterials (design, processing, characterization, modeling) and applications to stem cells regenerative orthopedic and dental medicine (NAMABIO)*; Responsabil pentru Romania - Management Committee Member; 2011-2015.
Pic5. Biomaterials and advanced physical techniques for regenerative cardiology and neurology, BIONECA, CA COST Action CA16122 (2017-2019).
Pic6. FP6-Marie Curie Actions-ToK; Contract nr. 014059; *Intensive Program for Transfer of Knowledge to Eastern Europe Reference Pole for Micro- and Nanotechnologies (NANOTEC-EST)*; Director de proiect: Meghea Aurelia/Bunea Daniel, (2005-2008).

Pn – Proiecte nationale de cercetare-dezvoltare-inovare obtinute prin competitie la care am fost director proiect/ responsabil al partenerului.

Pn1. Contract PCE 100/2021, *Meta-structuri formate din acoperiri compozite ale unor implanturi biodegradabile din aliaj Mg-Ca pentru regenerare osoasa* (MAGICBONE), PN III – Cercetare fundamentala si de frontiera, Proiecte de cercetare exploratorie, **Director de proiect** (2021-2023).
Pn2. Contract 60PCCDI/2018, *Obtinerea si expertizarea unor noi materiale biocompatibile pentru aplicatii medicale* (MedicalMetMat), PN III – Dezvoltarea sistemului national de cercetare-dezvoltare, **Responsabil proiect** (2018-2020).
Pn3. Contract 22BM/2018, PN-III-P3-3.1-PM-RO-CN-2018-0201, *Composite scaffolds with biological functions for bone tissue engineering*, **Director proiect** (2018-2019).
Pn4. Contract 122BG/2016, *Formulari de avangarda pe baza de eugenol nanocapsulat cu adresabilitate in medicina dentara* (NANOEUCAPS), PN III – Cresterea competitivitatii economiei romanesti prin cercetare, dezvoltare si inovare, **Responsabil proiect** (2016-2018).
Pn5. Contract 271/2014, *Obtinerea de implante bioresorbabile din aliaje de magneziu, utilizabile in chirurgia gleznei si a piciorului*, PN II-Parteneriate in domenii prioritare, Domeniul 7, **Director de proiect** (2014-2017).
Pn6. Contract 132 /2014, *Suporturi magnetice biomimetice ca strategie alternativa pentru ingineria si repararea tesutului osos*, PN II-Parteneriate in domenii prioritare, Domeniul 4, **Responsabil proiect** (2014-2017).
Pn7. Contract 72-192/01.10.2008, *Implante resorbabile utilizate in artroscopie realizate din biomateriale biomimetice* - PROGRAMUL 4 -PARTENERIATE IN DOMENIILE PRIORITARE; Domeniul 7, **Director de proiect** (2008-2011).
Pn8. Contract 72-180/01.10.2008, *Materiale nanostructurate pentru functionalizarea suprafetelor endoprotezelor articulare cu uzura redusa*, PROGRAMUL 4 - PARTENERIATE IN DOMENIILE PRIORITARE; Domeniul 7, **Responsabil proiect** (2008-2011).
Pn9. Contract nr. 42-132/01.10.2008, *Dispozitiv medical pentru tratarea afectiunilor articulare bazat pe nanomateriale si efectele campului magnetic*, PROGRAMUL 4 - PARTENERIATE IN DOMENIILE PRIORITARE; Domeniul 4, **Responsabil proiect** (2008-2011).
Pn10. Contract nr. 235/2006, *Biofunctionalizarea suprafetei implanturilor pentru osteosinteza*, Programul CEEEX RELANSIN, **Director de proiect** (2006-2009).
Pn11. Contract nr. 165/2006, *Dezvoltarea de tehnici inovative in chirurgia abdominala bazate pe utilizarea unor structuri biointegrabile si dezvoltarea de noi metode de evaluare a biodegradabilitatii acestora*, Programul CEEEX- VIASAN, **Responsabil proiect** (2006-2009).
Pn12. Contract nr. 269/2006, *Metode complementare de testare a biomaterialelor utilizate in artroplastie, in vederea limitarilor testelor in vivo*, Programul CEEEX- RELANSIN, **Responsabil proiect** (2006-2009).
Pn13. Contract nr. 2146/2004, *Gama de departatoare autostatice cu multiple aplicatii chirurgicale*, Pogramul PNCDI - RELANSIN, **Director de proiect** (2004-2007).

Pn14. Contract nr. 267/2004, *Realizarea si dezvoltarea unui echipament modern destinat ambalarii produselor alimentare portionate, prin metoda top sealing*, Programul PNCDI - AGRAL, **Responsabil proiect** (2004-2007).

Pn15. Contract nr. 33/2003, *Ghid multimedia pentru educatie medicala*, Programul PNCDI - RELANSIN, Parteneriat in cadrul contract nr.1771/2003, **Responsabil proiect** (2003-2006).

Pn16. Contract nr.101/2003, *Componenta femurala pentru proteza totala de sold*, Programul PNCDI INVENT, **Responsabil proiect** UPB (2003-2004).

Pn17. Contract nr. 34967/2001, *Cercetari privind stabilirea unei tehnologii ecologice de reciclare a deseurilor de titan in vederea obtinerii unui nou aliaj de titan utilizabil ca biomaterial*, Grant tip A, Tema nr.15, Cod CNC SIS 600/2001 si 318/2002, **Director de proiect** (2001-2003).

Pn18. Contract nr. 5076/1999, *Cercetari privind selectia si utilizarea materialelor biocompatibile pentru obtinerea implanturilor ortopedice prin turnare de precizie, cu ajutorul modelelor usor fuzibile*, Grant tip T, Tema B48, 1999 si 2000 (act ad. 6028/2000, tema A39), **Director de proiect**.

Pnc - Proiecte nationale de cercetare-dezvoltare-inovare obtinute prin competitie la care am fost membru in colectivul de lucru.

Pnc1. Contract PN-III-P1-1.2-PCCDI-2017-0407, *Smart materials for medical applications*.

Pnc2. Contract PN-III-P2-2.1-BG-2016-0338, *Spectral Technology for Advanced Securing of the Documents*.

Pnc3. Contract nr. 175/2012, *Straturi subtiri biocompatibile pentru imbunatatirea aderenței ceramice-metal in restaurarile dentare*, UEFISCDI, Director de proiect Cosmin Cotrut (3 ani).

Pnc4. Contract nr.71-080/2007, *Materiale multifunctionale cu efect bioactiv destinate implantologiei*, Programul PARTENERIATE IN DOMENIILE PRIORITARE, Director de proiect Cosmeleata Georgeta (3 ani).

Pnc5. Contract nr. 71-059/2007, *Tehnologii inovative de realizare a unor produse din aliaje tip permalloy competitive la export*, Programul PARTENERIATE IN DOMENIILE PRIORITARE, Director de proiect Saban Rami (3 ani).

Pnc6. Contract nr. 194/2006, *Cercetari fundamentale si experimentale privind biomaterialele cu memoria formei cu aplicabilitate in realizarea stenturilor vasculare*, Programul CEEX, Director de proiect Ion Ciuca (2 ani).

Pnc7. Contract nr.1157/2005, *Cercetarea comparativa a diferitelor tipuri de proteze de sold, in ceea ce priveste supravietuirea lor, efectele secundare si rezultatele imediate si tardive*, Program CEEX-VIASAN, Director de proiect Tudor Andrei (3 ani).

Pnc8. Contract nr. 4-116/2004, *Cercetari privind gradul de prelucrare al suprafetei biomaterialelor metalice asupra proceselor de osteointegrare in tesuturile biologice*, Program PNCDI-CERES, Director de proiect Bunea Daniel (2 ani).

Pnc9. Contract nr.1868/2003, *Realizarea si dezvoltarea unui echipament de ambalat etans, in folie termo-contractibila si termosudabila a produselor sau gruparilor de produse alimentare si nealimentare*, Programul PNCDI – RELANSIN, Director de proiect Moldovan Laurentiu (2 ani).

Pnc10. Contract nr.1771/2003, *Laborator mobil pentru determinarea la distanta a amprentei termice a tehnicii militare in gama spectrala 2-5 μ m si 8-12 μ m*, Program PNCDI-RELANSIN, Director de proiect Pencea Ion (2 ani).

Pnc11. Contract nr.1717/2003, *Tehnologii moderne de obtinere si prelucrare a biomaterialelor metalice destinate implanturilor dentare*, Program PNCDI-RELANSIN, Director de proiect Simona Zamfir (2 ani).

Pnc12. Contract nr.107/2003, *Managementul si dezvoltarea unui suport integrat multimedia pentru persoanele cu handicap locomotor*, Program PNCDI-INFOSOC, Director de proiect Augustin Semenescu (2 ani).

Pnc13. Contract nr.1776/2003, *Aparat pentru determinarea timpilor de coagulare*, Program PNCDI-RELANSIN, Director de proiect Aurelia Meghea (2 ani).

Pnc14. Contract nr.84/2002, *Tehnologie ecologica de reciclare a deseurilor de aliaje de titan din industria aeronautica*, Program PNCDI – CERES, Director de proiect Georgeta Cosmeleata (2 ani).

Pnc15. Contract nr.12/2001, *Realizarea si dezvoltarea unei familii de aparate de ambalat in folie elastica tip stretch, destinate comercializarii produselor alimentare sau de panificatie*, Program PNCDI - AGRAL, Director de proiect Daniel Bunea (3 ani).

Pnc16. Contract nr. 1476/2001, *Baza de date pentru biomateriale, implante si tehnologii de procesare a biomaterialelor in vederea obtinerii implantelor*, Program PNCDI - RELANSIN, Director de proiect Mihai Tarcolea (3 ani).

Pnc17. Contract nr.18/2001, *Centru virtual de selectie a biomaterialelor*, Program PNCDI-INFOSOC, Director de proiect Mihai Tarcolea (3 ani).

Pnc18. Contract nr. 58/2001, *Cresterea calitatii implantelor (ortopedice, dentare) prin depuneri de straturi subtiri cu proprietati biocompatibile superioare*, Program PNCDI - MATNANTEH, Director de proiect Simona Zamfir (3 ani).

Pnc19. Contract nr.82/2001, *Modelarea si cuantificarea interactiilor biomaterialelor si implantelor cu mediul gazda si/sau tesut-implant prin metode avansate*, Program PNCDI - BIOTECH, Director de proiect Caloianu Maria (3 ani).

Pnc20. Contract nr.133/2000, *Tehnologii de acoperire in vederea imbunatatirii sculelor*, Programul PNCDI - RELANSIN, Director de proiect Simona Zamfir (3 ani).

Pnc21. Contract nr.1474/2001, *Realizarea protezelor articulare de sold*, Program PNCDI - RELANSIN, Director de proiect Branzei Mihai (3 ani).

Pnc22. Contract nr. 1473/2001, *Centrul de Biomateriale BIOMAT*, Program PNCDI - RELANSIN, Responsabil de proiect

Zamfir Simona (3 ani).

Pnc23. Contract nr. 1472/2001, *Sistem integrat de educatie in domeniul biomaterialelor*, Program PNCDI - RELANSIN, Director de proiect Dan Gheorghe (3 ani).

Data

07.03.2025

Semnatura

Prof.univ.habil.dr.ing. Vasile Iulian Antoniac