

**THE LIST OF PUBLICATIONS AND ACTIVITIES**

**Prof.Habil.Dr.Ing. Florin Miculescu**

**I. Thesis**

- T1. **Ph.D. Thesis (T)** “*Experimental research on the biomaterial-tissue interface interactions*”, Politehnica University from Bucharest, 2006.
- T2 **Habilitation Thesis (H)** “*Materials for bones reconstruction and thin layers analysis by computer simulation and microanalytical experiment*”, Politehnica University from Bucharest, 2014.

**II. Books (B)**

B – Books / courses (manuals) for students use, published in recognized publishers

- B1. D. Bojin, D. Bunea, **F. Miculescu**, M. Miculescu, „*Microscopie Electronică de Baleaj și Aplicații*”, Ed. AGIR, 2005, ISBN 973-720-019-5 (217 pag).
- B2. **F. Miculescu**, “*Metode Experimentale de Analiză a Biomaterialelor*”, Ed. Printech, 2007, ISBN 978-973-718-658-4 (152 pag).
- B3. Ion Pătrașcu, L.T. Ciocan, **F. Miculescu**, “*Biomateriale și Tehnologii Protetice în Implantologia Orală*”, Ed. Printech, 2008, ISBN 978-606-521-093-6 (189 pag)
- B4. **F. Miculescu**, “*Tehnici de analiză și control a biomaterialelor*”, Ed. Printech, 2009, ISBN 978-606-521-331-9 (244 pag).
- B5. L.T. Ciocan, **F. Miculescu**, I. Pătrașcu, M. Miculescu, “*Biological reactions to dental implants, In Implant dentistry – A rapidly evolving practice*”, Ilser Turkeyilmaz Editor, Ed. InTech, pag. 505-530, ISBN 978-953-307-658-4, 2011.
- B6. **F. Miculescu**, A. Maidaniuc, G.E. Stan, M. Miculescu, S.I. Voicu, L.T.Ciocan, “*Thermal Degradation and Morphological Characteristics of Bone Products*”, in “Reactions and Mechanisms in Thermal Analysis of Advanced Materials”, Wiley, Atul Tiwari, Baldev Raj Editors, pag. 393-410, ISBN: 978-1-119-11757-5, 2015.
- B7. Antoniac, I.V., **F. Miculescu**, F., Laptoiu, D., Antoniac, A., Niculescu, M., Grecu, D., Book Chapter, “*Retrieval analysis of hip prostheses*”, in Handbook of Bioceramics and Biocomposites, Ed. IV. Antoniac, Springer, pag. 901-933, DOI: 10.1007/978-3-319-12460-5\_43, ISBN 978-3-319-12459-9, 2016.
- B8. **F. Miculescu**, Ciocan, L.T., Miculescu, M., Berbecaru, A., Oliva, J., Comăneanu, R.M., Book Chapter “*Failure analysis of dental prosthesis*”, in Handbook of Bioceramics and Biocomposites, Ed. IV. Antoniac, Springer, pag. 1217-1246, DOI: 10.1007/978-3-319-12460-5\_56, ISBN 978-3-319-12459-9, 2016.
- B9. **F. Miculescu**, A. Maidaniuc, G.E. Stan, M. Miculescu, S.I. Voicu, A. Cîmpean, V. Mitran, D. Batalu, “*Tuning hydroxyapatite particles characteristics for solid free fabrication of bone scaffolds*”, in Advanced Composite Materials (Advanced Materials Book Series), Eds. Ashutosh Tiwari, Mohammad Rabia Alenezi and Seong Chan Jun, WILEY-Scrivener Publishing, USA, pag. 321-397, DOI: 10.1002/9781119242666, ISBN 987-1-119-24253-6, 2016.
- B10. M.C. Corobea, Z. Vuluga, D. Florea, **F. Miculescu**, S.I. Voicu, “*Composites and nanocomposites based on Polylactic acid obtaining*” in Handbook of Composites from renewable Polymers, John Wiley and Sons, vol.8, pag 327-360, DOI: 10.1002/9781119441632.ch160, ISBN 978-1-119-22383-2, 2017.
- B11. **F. Miculescu**, A.C. Mocanu, A. Maidaniuc, C.A. Dascălu, M. Miculescu, S.I. Voicu, “*Biomimetic Calcium Phosphates Derived from Marine and Land Bioresources*”, in “*Hydroxyapatite - Advances in Composite Nanomaterials, Biomedical Applications and Its Technological Facets*” book edited by J Thirumalai InTech, pag 89-108, <http://dx.doi.org/10.5772/intechopen.71489>, ISBN 978-953-51-5731-1, 2018.
- B12. **F. Miculescu**, AC. Mocanu, GE. Stan, A. Maidaniuc, M. Miculescu, Sl. Voicu, I. Antoniac, “*Bioceramics derived from marble and sea shells as potential bone substitution materials*”, in Bioceramics and biocomposites: from experiment to clinical use, Ed.I. Antoniac, Wiley, pag 87-122, <https://doi.org/10.1002/9781119372097.ch5>, ISBN-10: 1119049342, 2019.

**III. OTHER PUBLISHED MATERIALS**

**I - Collections of Problems and Laboratory Guidance published with ISBN**

- I1. Antoniac, **F. Miculescu**, M. Miculescu, D. Lăptoiu, “*Biomateriale - Culegere de probleme*”, Ed. Printech, 2007, ISBN 978-973-718-880-9 (112 pagini).

**IV. EXTENSIVE PUBLISHED ARTICLES / STUDIES (C) Recognized international journals (listed / indexed ISI Clarivate).****ISI Clarivate Quoted articles**

- C1 P. Moldovan, G. Popescu, F. Miculescu, *Microscopic Study Regarding The Microstructure Evolution Of The 8006 Alloy In The Plastic Deformation Process*, Journal of Materials Processing Technology, Vol. 153, Part 1, Sp. Iss. Si, Pag. 408-415, Document Type: Article. DOI: 10.1016/J.Jmatprotec. 2004.04.345, WOS:000225845500064, ISSN: 0924-0136, 2004. Web of Science Categories: Materials Science, Multidisciplinary, **Q1, IF 4.178**
- C2 E. Aionicesei, D. Ionita, F. Miculescu, A. Cimpan, I. Demetrescu, *Connection Between Biocompatibility and Electrochemical Stability of a Co-Cr-Mo Alloy*, Revista de Chimie, Vol. 57, Iss. 8, Pag. 813-818, Document Type: Article. WOS:000241770200006, ISSN: 0034-7752, 2006. Web of Science Categories: Chemistry, Multidisciplinary, **Q3, IF 1.605**
- C3 M. Caposi, D. Ionita, F. Miculescu, I. Demetrescu, *Surface Treatments in Electrochemical Behaviour of TiNi Wires for Implant Purposes*, Revista de Chimie, Vol. 58, Iss. 9, Pag. 875-879, Document Type: Article. WOS:000250636800004, ISSN: 0034-7752, 2007. Web of Science Categories: Chemistry, Multidisciplinary, **Q3, IF 1.605**
- C4 M.M. Sovar, G.G. Tihan, F. Miculescu, V. Mitran, *Effect of Saliva pH on Electrochemical Stability of Co-Cr-Mo Bioalloy with a Bio-Chemically Modified Surface*, Revista de Chimie, Vol. 58, Iss. 9, Pag. 886-889, Document Type: Article, WOS:000250636800006, ISSN:0034-7752, 2007. Web of Science Categories: Chemistry, Multidisciplinary, **Q3, IF 1.605**
- C5 M. Mindroiu, E. Cicek, F. Miculescu, I. Demetrescu, *The Influence of Thermal Oxidation Treatment on the Electrochemical Stability of TiAlV and TiAlFe Alloys and Their Potential Application as Biomaterials*, Revista de Chimie, Vol. 58, Iss. 9, Pag. 898-903, Document Type: Article, WOS:000250636800009, ISSN: 0034-7752, 2007. Web of Science Categories: Chemistry, Multidisciplinary, **Q3, IF 1.605**
- C6 F. Miculescu, D. Bojin, L.T. Ciocan, I.A. Antoniac, M. Miculescu, N. Miculescu, *Experimental Research on Biomaterial-Tissue Interface Interactions*, Journal of Optoelectronics and Advanced Materials, Vol. 9 Iss. 11, Pag. 3303-3306, Document Type: Article, ISSN:1454-4164, 2007. Web of Science Categories: Materials Science, Multidisciplinary, **Q4, Principal author IF 0.588**
- C7 D. Ionita, F. Miculescu, D. Bojin, I. Demetrescu, *Various Procedures in Electrochemical Evaluation of Hydroxyapatite Films on Titanium*, Journal of Optoelectronics and Advanced Materials, Vol. 9, Iss. 11, Pag. 3316-3319, Document Type: Article. WOS:000251435200005, ISSN: 1454-4164, 2007. Web of Science Categories: Materials Science, Multidisciplinary, **Q4, IF 0.588**
- C8 T. Laurian, A. Tudor, I.A. Antoniac, F. Miculescu, *A Micro-Scale Abrasion Test to Study the Influence of Counterface Roughness on the Wear Resistance of UHMWPE*, Journal of Optoelectronics and Advanced Materials, Vol. 9, Iss. 11, Pag. 3383-3388, Document Type: Article, WOS:000251435200021, ISSN: 1454-4164, 2007. Web of Science Categories: Materials Science, Multidisciplinary, **Q4, IF 0.588**
- C9 E. Aldea, M. Giurginca, F. Miculescu, I. Demetrescu, *Infrared and ESEM Technique in Supporting Ti and Ti-Al-V Alloy Behaviour in Afnor and Tani-Zucchi Solutions*, Journal of Optoelectronics and Advanced Materials, Vol. 9. Iss. 11, Pag. 3396-3399, Document Type: Article. WOS:000251435200023, ISSN: 1454-4164, 2007. Web of Science Categories: Materials Science, Multidisciplinary, **Q4, IF 0.588**
- C10 I. Pencea, M. Branzei, F. Miculescu, M. Pencea, O. Trante, M. Miculescu, *The Matrix Effect on Spectrochemical Analysis Accuracy of AISI 316 Biomaterial Grades*, Journal of Optoelectronics and Advanced Materials, Vol. 9, Iss. 11, Pag. 3411-3414, Document Type: Article. WOS:000251435200026, ISSN: 1454-4164, 2007. Web of Science Categories: Materials Science, Multidisciplinary, **Q4, IF 0.588**
- C11 E. Rusen, B. Marculescu, L. Butac., T. Zecheru, F. Miculescu, T. Rotariu, *Acrylic Cements for Dental Prosthetics*, Journal of Optoelectronics and Advanced Materials, Vol. 10, Iss. 12, Pag. 3436-3441, Document Type: Article, WOS:000262022500056, ISSN: 1454-4164, 2008. Web of Science Categories: Materials Science, Multidisciplinary, **Q4, IF 0.588**
- C12 I Bordeasu, MO. Popoviciu, B. Ghiban, N. Ghiban, F. Miculescu, Aspects concerning cavitation erosion of some austenitic stainless steels used for impeller blades and displacement motors, METALURGIA INTERNATIONAL, Volume: 14, Issue: 9, Pages: 5-8, 2009, Web of Science Categories: Metallurgy & Metallurgical Engineering, WOS:000269587900001, ISSN: 1582-2214, **Q4, IF 0.134**
- C13 C. Ittu, N. Constantin, F. Miculescu, C. Dobrescu, Insulating powder used in iron and steel industry, METALURGIA INTERNATIONAL, Volume: 14, Issue: 4, Pages: 25-28, 2009, Web of Science Categories: Metallurgy & Metallurgical Engineering, WOS:000265002000006, ISSN: 1582-2214 **Q4, IF 0.134**
- C14 I. Patrăscu, L.T. Ciocan, F. Miculescu, G. T. Niculescu, *Morpho-Compositional Study of the Ageing Biomaterial in Bone Implants*, Journal of Optoelectronics and Advanced Materials, Vol. 11, No. 5, Pag. 744 - 749, Document Type: Article. WOS:000267212600029, ISSN: 1454-4164, 2009. Web of Science Categories: Materials Science, Multidisciplinary, **Q4, IF 0.588**
- C15 G.E. Stan, C.O. Morosanu, D.A. Marcov I. Pasuk, F. Miculescu, G. Reumont, *Effect of annealing upon the*

- structure and adhesion properties of sputtered bio-glass/titanium coatings*, Applied Surface Science, Elsevier, APSUSC-18976, Vol. 255, Iss. 22, Pag. 9132-9138, Document Type: Article. DOI: 10.1016/j.apsusc.2009.06.117, WOS:000269075700029, ISSN: 0169-4332, 2009. Web of Science Categories: Chemistry, Physical; Materials Science, Coatings & Films; Physics, Applied; Physics, Condensed Matter, **Q1, IF 5.155**
- C16 I. Titorencu, M.G. Albu, M. Giurginca, V. Jinga, I.A. Antoniac, V. Trandafir, C. Cotrut, **F. Miculescu**, M. Simionescu, *In Vitro Biocompatibility of Human Endothelial Cells with Collagen-Doxycycline Matrices*, Molecular Crystals and Liquid Crystals, Vol. 523, Pag. 82-96, Document Type: Article. DOI: 10.1080/15421401003724126, WOS:000278163400007, ISSN: 1542-1406, 2010. Web of Science Categories: Crystallography, **Q4, IF 0.559**
- C17 I. Iosub, V. Malinovschi, **F. Miculescu**, A. Meghea, *Biomineralization Processes in Formation of Urolits*, Molecular Crystals and Liquid Crystals, Vol. 523, Pag. 139=[711]-147=[719], Document Type: Article. DOI: 10.1080/15421401003726691, WOS:000278163400012, ISSN: 1542-1406, 2010. Web of Science Categories: Crystallography, **Q4, IF 0.559**
- C18 L. T. Ciocan, **F. Miculescu**, M. Miculescu, I. Patrascu, *Retrieval analysis on dental implants biontegration phases*, Romanian Journal of Morphology and Embryology, Vol. 51, Iss. 1, Pag. 117–122, Document Type: Article. WOS:000275165700018, , ISSN: 1220-0522, 2010. Web of Science Categories: Developmental Biology, **Q4, IF 1.5**
- C19 I. Jepu, C. Porosnicu, I. Mustata, C.P. Lungu, V. Kuncser, **F. Miculescu**, *Optimization of thermionic vacuum arc plasma used for multilayer GMR/TMR films preparation*, Romanian Reports in Physics, Vol. 62, Iss. 4, Pag. 771-779, Document Type: Article. WOS:000286575200010, ISSN: 1221-1451, 2010. Web of Science Categories: Physics, Multidisciplinary, **Q2 IF 1.94**
- C20 I. Lacatusu, N. Badea, R. Nita, A. Murariu, **F. Miculescu**, I. Iosub, A. Meghea, *Encapsulation of Fluorescence Vegetable Extracts Within a Templated Sol-Gel Matrix*, Optical Materials, Vol. 32, Pag. 711–718, Document Type: Article. WOS:000276702900013, ISSN: 0925-3467, 2010. Web of Science Categories: Materials Science, Multidisciplinary, **Q2 IF 2.68**
- C21 S. Visan, V. Ciobotaru, F. Ionescu, C. Zaharia, **F. Miculescu**, C. Cincu, *Correlation of chemical composition and microstructure with technical properties of an elasto-plastic composite material*, Optoelectronics and Advanced Materials-Rapid Communications, Vol. 4, Iss. 5, Pag. 722-725, Document Type: Article. WOS:000279246000025, ISSN: 1842-6573, 2010. Web of Science Categories: Materials Science, Multidisciplinary; **Q2 IF 0.452**
- C22 V. Kuncser, G. Schintieie, P. Palade, I. Jepu, I. Mustata, C.P. Lungu, **F. Miculescu**, G. Filoti, *Magnetic Properties of Fe-Co Ferromagnetic Layers and Fe-Mn/Fe-Co Bilayers Obtained by Thermo-Ionic Vacuum Arc*, Journal of Alloys and Compounds, Vol. 499, Iss. 1, Pag. 23-29, Document Type: Article. DOI: 10.1016/j.jallcom.2010.03.129, WOS:000278579400006, ISSN: 0925-8388, 2010. Web of Science Categories: Materials Science, Multidisciplinary; **Q1, IF 4.175**
- C23 G.E. Stan, D.A. Marcov, I. Pasuk, **F. Miculescu**, S. Pina, D.U. Tulyaganov, J.M.F. Ferreira, *Bioactive glass thin films deposited by magnetron sputtering technique: The role of working pressure*, Applied Surface Science, Vol. 256, Pag. 7102–7110, Document Type: Article. DOI: 10.1016/j.apsusc.2010.05.035, WOS:000279592200029, ISSN: 0169-4332, 2010. Web of Science Categories: Chemistry, Physical; Materials Science, Coatings & Films; Physics, Applied; Physics, Condensed Matter; **Q1, IF 5.155**
- C24 T. Zecheru, T. Rotariu, E. Rusen, B. Marculescu, **F. Miculescu**, L. Alexandrescu, I.A. Antoniac, I.C. Stancu, *Poly(2-hydroxyethyl methacrylate-co-dodecyl methacrylate-co-acrylic acid): synthesis, physico-chemical characterisation and nafcillin carrier*, Journal of Materials Science-Materials in Medicine, Vol. 21, Iss. 10, Pag. 2793-2804, Document Type: Article. DOI: 10.1007/s10856-010-4129-y, WOS:000283371200009, ISSN: 0957-4530, 2010. Web of Science Categories: Engineering, Biomedical; Materials Science, Biomaterials, **Q2, IF 2.467**
- C25 **F. Miculescu**, L.T. Ciocan, M. Miculescu, A. Ernuteanu, *Effect of Heating Process on Micro Structure Level of Cortical Bone Prepared for Compositional Analysis*, Digest Journal of Nanomaterials And Biostructures, Vol. 6, Iss. 1, Pag. 225-233, Document Type: Article. WOS:000289716200028, ISSN: 1842-3582, 2011. Web of Science Categories: Materials Science, Multidisciplinary, **Q4, Principal author IF 0.638**
- C26 **F. Miculescu**, I. Jepu, C. Porosnicu, C.P. Lungu, M. Miculescu, B. Burhala, *A Study on the Influence of the Primary Electron Beam on Nanodimensional Layers Analysis*, Digest Journal of Nanomaterials And Biostructures, Vol. 6, Iss. 1, Pag. 307-317, Document Type: Article. WOS:000289716200039, ISSN: 1842-3582, 2011. Web of Science Categories: Materials Science, Multidisciplinary, **Q4, Principal author IF 0.638**
- C27 I.V. Popescu, I. Pencea, V.F. Anghelina, M. Branzei, **F. Miculescu**, C. Macris, C. Petre, *New Proves Concerning Streamer Mechanism of Vaporization and Sputtering of a Stainless Steel During Sparking for Optical Emission Spectroscopical Analysis*, Romanian Reports in Physics, Vol. 63, Iss. 3 Pag. 823-838, Document Type: Article. WOS:000293992000019, ISSN: 1221-1451, 2011. Web of Science Categories:

- Physics, Multidisciplinary, **Q2, IF 1.94**
- C28 **F. Miculescu**, I. Jepu, C.P. Lungu, M. Miculescu, I. Antoniac, M. Tarcolea, M. Branzei, *Correlation Between Simulation and Microanalytical Experiment in Multilayer Nanostructures Type Analysis*, University Politehnica of Bucharest Scientific Bulletin - Series A - Applied Mathematics and Physics, Vol. 73, Iss. 4, Pag. 153-166, Document Type: Article. WOS:000299150300013, ISSN: 1223-7027, 2011. Web of Science Physics, Multidisciplinary; **Q4, Principal author IF 0.478**
- C29 E. Rusen, A. Mocanu, B. Marculescu, R. Somoghi, L. Butac, **F. Miculescu**, C. Cotrut, I. Antoniac, C. Cincu, *Obtaining complex structures starting from monodisperse poly(styrene-co-2-hydroxyethylmethacrylate) spheres*, Colloids and Surfaces A - Physicochemical and Engineering Aspects, Vol. 375, Iss. 1-3 Pag. 35-1, Document Type: Article. DOI:10.1016/j.colsurfa.2010.11.034, WOS:000287285500005, ISSN: 0927-7757, 2011. Web of Science Categories: Chemistry, Physical, **Q2, IF 3.131**
- C30 C. Zaharia, M.R. Tudora, **F. Miculescu**, C. Cincu, D. Chappard, *Mineralization behaviour of some new phema-based copolymers with potential uses in tissue engineering*, Optoelectronics and Advanced Materials - Rapid Communications, Vol. 5, Iss. 3-4 Pag. 314-317, Document Type: Article. WOS:000290774800027, ISSN: 1842-6573, 2011. Web of Science Categories: Materials Science, Multidisciplinary; **Q2, IF 0.452**
- C31 **F. Miculescu**, I. Jepu, C.P. Lungu, M. Miculescu, M. Bane, *Researches Regarding The Microanalysis Results Optimisation on Multilayer Nanostructures Investigations*, Digest Journal of Nanomaterials and Biostructures, Vol. 6, Iss. 2, Pag. 769-778, Document Type: Article. WOS:000290789400050, ISSN: 1842-3582, 2011. Web of Science Categories: Materials Science, Multidisciplinary, **Q4, Principal author IF 0.638**
- C32 M. Braic, V. Braic, M. Balaceanu, A. Vladescu, C.N. Zoita, I. Titorencu, V. Jinga, **F. Miculescu**, *Preparation and characterization of biocompatible Nb-C coatings*, Thin Solid Films, Vol. 519, Iss. 12, Special Iss. SI, Pag. 4064-4068, Document Type: Article. DOI: 10.1016/j.tsf.2011.01.193, WOS:000290184500020, ISSN: 0040-6090, 2011. Web of Science Categories: Materials Science, Multidisciplinary, **Q2, IF 1.888**
- C33 I.C. Bujanca, M.C. Corobeia; **F. Miculescu**, M. Dimonie, *Polystyrene latex particles obtained by emulsifier-free emulsion polymerization and their interaction with bentonite*, E-Polymers, Article Number: 033, Document Type: Article. WOS:000289366900004, ISSN: 1618-7229, 2011. Web of Science Categories: Polymer Science **Q3, IF 1.491**
- C34 **F. Miculescu**, M. Miculescu, L.T. Ciocan, A. Ernuteanu, I.A. Antoniac, I. Pencea, E. Matei, *Comparative Studies Regarding Heavy Elements Concentration in Human Cortical Bone*, Digest Journal of Nanomaterials and Biostructures, Vol. 6, Iss. 3, Pag. 1117-1127, Document Type: Article. WOS:000297986100026, ISSN: 1842-3582, 2011. Web of Science Categories: Materials Science, Multidisciplinary, **Q4, Principal author IF 0.638**
- C35 A. Mocanu, B. Marculescu, R. Somoghi, **F. Miculescu**, C. Boscornea, I.C. Stancu, *Fluorescence enhancement for the complex PAMAM-BSA in the presence of photonic crystal heterostructures*, Colloids and Surfaces A - Physicochemical and Engineering Aspects, Vol. 392, Iss. 1 Pag. 288-293, Document Type: Article. DOI: 10.1016/j.colsurfa.2011.10.006, WOS:000298899300038, ISSN: 0927-7757, 2011. Web of Science Categories: Chemistry, Physical, **Q2, IF 3.131**
- C36 G.E. Stan, I. Pasuk, L.M. Trinca, A.C. Galca, M. Enculescu, **F. Miculescu**, *Tilt c Axis Crystallite Growth of Aluminium Nitride Films by Reactive RF-Magnetron Sputtering*, Digest Journal of Nanomaterials and Biostructures, Vol. 7, Iss. 1, Pag. 41-50, Document Type: Article. WOS:000303649000005. ISSN: 1842-3582, 2012. Web of Science Categories: Materials Science, Multidisciplinary, **Q4, IF 0.638**
- C37 B.M. Galbinasu, **F. Miculescu**, D. Pirvu, L.T. Ciocan, D. Herschbach, A. Tonko, I. Patrascu, F. Stoiciu, *Dental tissue - inlay interface structural shift at mechanical and thermal stresses*, Optoelectronics and Advanced Materials-Rapid Communications, Vol. 6, Iss. 3-4 Pag.: 459-464, Document Type: Article. WOS:000304431000023, ISSN: 1842-6573, 2012. Web of Science Categories: Materials Science, Multidisciplinary; **Q4, IF 0.452**
- C38 O. Vasile, **F. Miculescu**, S.I. Voicu, *Correlation aspects between morphology, infrared and acoustic absorptions properties of various materials*, Optoelectronics and Advanced Materials-Rapid Communications, Vol. 6, Iss. 5-6, Pag. 631-638, Document Type: Article. WOS:000306577000025, ISSN: 1842-6573, 2012. Web of Science Categories: Materials Science, Multidisciplinary; **Q4, IF 0.452**
- C39 C. Cotrut, A. Vladescu, A.V. Braic, M. Braic, M. Balaceanu, **F. Miculescu**, *Evaluation of duplex (Zr,Al)CN coatings with improved tribological performance*, Journal of Optoelectronics and Advanced Materials, Vol. 14, Iss. 7-8 Pag. 646-652, Document Type: Article. WOS:000308718300013, ISSN: 1454-4164, 2012. Web of Science Categories: Materials Science, Multidisciplinary; **Q4, IF 0.588**
- C40 M.D. Vraneanu, I.A. Antoniac, **F. Miculescu**, R. Saban, *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, Vol. 14, Iss. 7-8 Pag. 671-677, Document Type: Article. WOS:000308718300017, ISSN: 1454-4164, 2012. Web of Science Categories: Materials Science, Multidisciplinary; **Q4, IF 0.588**

- C41 **F. Miculescu**, G. E. Stan, L. T. Ciocan, M. Miculescu, A. Berbecaru, I. Antoniac, *Cortical bone as resource for producing biomimetic materials for clinical use*, Digest Journal of Nanomaterials and Biostructures, Vol. 7, Iss. 4, Pag. 1667 – 1677, Document Type: Article, WOS:000312710300032, ISSN: 1842-3582, 2012. Web of Science Categories: Materials Science, Multidisciplinary, **Q4, Principal author IF 0.638**
- C42 **F. Miculescu**, M. Miculescu, L.T. Ciocan, I. Pencea, A. Ernuteanu, E. Matei, Correlation of Spectrometric Methods in Hard Tissue Heavy Elements Concentration Study, University Politehnica of Bucharest Scientific Bulletin-Series A-Applied Mathematics And Physics, Vol. 75, Iss. 1, Pag. 233-242. Document Type: Article. WOS:000315547300022, ISSN:1223-7027, 2013, Web of Science Categories: Physics, Multidisciplinary, **Q4, Principal author IF 0.478**
- C43 R.I. Zamfir, E. Popovici, **F. Miculescu**, M. Danila, A. Parau, Structural investigation of austenitic stainless steel layers obtained by laser surface alloying, Journal of Optoelectronics and Advanced Materials, Vol. 15, Iss. 3-4, Pag. 305-310, Document Type: Article. WOS:000319788000029, ISSN: 1454-4164, 2013. Web of Science Categories: Materials Science, Multidisciplinary; **Q4, IF 0.588**
- C44 **F. Miculescu**, E. Rusen, A. Mocanu, A. Diacon, R. Birjega, Hierarchical nanostructures of ZnO obtained in the presence of water soluble polymers, Powder Technology, Vol. 239, Pages: 56-58, Document Type: Article. DOI: 10.1016/j.powtec.2013.01.051, WOS:000318581300006, ISSN: 0032-5910, 2013. Web of Science Categories: Engineering, Chemical, **Q1, Autor principal IF 3.413**
- C45 **F. Miculescu**, L.T. Ciocan, M. Miculescu, M. Branzei, N. Ghiban, Thermal processing temperature influence on hard tissue chemical composition, Journal of Optoelectronics and Advanced Materials, Vol. 15, Iss. 7-8 Pag. 707-711, Document Type: Article, Accession Number: WOS:000323397900019, ISSN: 1454-4164, 2013. Web of Science Categories: Materials Science, Multidisciplinary; **Principal author Q4, IF 0.588**
- C46 D.L. Cursaru, G. Branoiu, I. Ramadan, **F. Miculescu**, Degradation of automotive materials upon exposure to sunflower biodiesel, Industrial Crops and Products, Vol. 54 Pag. 149-158, 2014, Document Type: Article, DOI: 10.1016/j.indcrop.2014.01.032, WOS:000336340600021, ISSN: 0926-6690, eISSN: 1872-633X, Web of Science Categories: Agricultural Engineering; Agronomy, **Q1, IF 4.191**
- C47 C. Vitelaru, N. Ghiban, A.C. Parau, M. Balaceanu, **F. Miculescu**, A. Vladescu, Corrosion behaviour of Ti6Al4V alloy in artificial saliva solution with fluoride content and low pH value, Materialwissenschaft und Werkstofftechnik, Vol. 45, Iss. 2, Pag. 91-98, 2014, Document Type: Article, DOI: 10.1002/mawe.201400191, WOS: 000331874400004, ISSN: 0933-5137, eISSN: 1521-4052, Web of Science Categories: Materials Science, Multidisciplinary, **Q4, IF 0.556**
- C48 R.M. Comaneanu, H.M. Barbu, C. Coman, **F. Miculescu**, L. Chiutu, Correlations between cytohistopathological tissue changes at the dental implant interface and the degree of surface processing, Romanian Journal of Morphology and Embryology, Vol. 55, Iss. 2, Pag. 335-341, 2014, Document Type: Article, WOS:000338329700013, ISSN: 1220-0522, Web of Science Categories: Developmental Biology, **Q4, IF 1.5**
- C49 D.I. Ciocan, D. Stanciu, M.A. Popescu, **F. Miculescu**, I. Plotog, G. Vărzaru, L.T. Ciocan, Electron microscopy analysis of different orthodontic brackets and their adhesion to the tooth enamel, Romanian Journal of Morphology and Embryology, Vol. 55, Iss. 2, Pag. 591-596, 2014, Document Type: Article, WOS:000342868500012, ISSN: 1220-0522. Web of Science Categories: Developmental Biology, **Q4, IF 1.5**
- C50 L. Duta, A.C. Popa, **F. Miculescu**, I.N. Mihailescu, Ultra high molecular weight polyethylene acetabular cups functionalized with bioactive glass coatings synthesized by pulsed laser deposition, Romanian Reports in Physics, Vol. 66, Iss. 3, Pag. 788-800, 2014, Document Type: Article, WOS: 000342035600019, ISSN: 12211451. Web of Science Categories: Physics, Multidisciplinary, **Q2, IF 1.94**
- C51 A.M. Stanescu, L. Stoica, C. Constantin, I. Lacatusu, O. Oprea, F. Miculescu, Physicochemical characterization and use of heat pretreated commercial instant dry baker's yeast as a potential biosorbent for Cu(II) removal, Clean - Soil, Air, Water, Vol 42, Iss. 11, 1 Pages 1632-1641, 2014, DOI: 10.1002/clen.201300484, Document Type: Article, WOS: 000344777700019, ISSN: 18630650. Web of Science Categories: Environmental Sciences, **Q3, IF 1.512**
- C52 ME. Mâñzână, B. Ghiban, I. Bordeaşu, N. Ghiban, M. Marin, **F. Miculescu**, Structural analysis of steels by cavitation erosion, Key Engineering Materials, Vol. 583, 2014, Pag. 28-31, DOI: 10.4028/www.scientific.net /KEM.583.28, Document Type: Conference Paper, WOS:000336552600005, ISSN: 10139826 ISBN: 978-303785866-0. **Q3, IF 0.224**
- C53 CM. Cotruţ, S. Ciucă, **F. Miculescu**, I. Antoniac, M. Tâncolea, DM. Vrânceanu, The influence of classical and modern manufacturing technologies on the properties of metal dental bridges, Key Engineering Materials, Vol. 583, 2014, Pag. 163-168, DOI: 10.4028/www.scientific.net/KEM.583.163, Document Type: Conference Paper, ISSN: 10139826 ISBN: 978-303785866-0. **Q3, IF 0.224**
- C54 **F. Miculescu**, I. Pencea, M. Miculescu, I. Antoniac, LT. Ciocan, A. Ernuteanu, Energy dispersive techniques using X-ray fluorescence with primary X-rays for human hard tissues analysis, Key Engineering Materials,

Vol. 583, 2014, Pag. 129-133, DOI: 10.4028/www.scientific.net/KEM.583.129, Document Type: Conference Paper, ISSN: 10139826 ISBN: 978-303785866-0. **Q3, IF 0.224**

- C55 M. Dinu, M. Cojocaru, V. Braic, M. Tarcolea, M. Braic, **F. Miculescu**, A. Vladescu, C.M. Cotrut, Improvement of the tribological performance in corrosive environment of CoCr alloy by TiSiON coatings, Applied Surface Science, Vol. 332, Pag. 295-299, 2015, Document Type: Article, DOI: 10.1016/j.apsusc.2015.01.221, WOS: 000350373300040, ISSN: 01694332. Web of Science Categories: Chemistry, Physical; Materials Science, Coatings & Films; Physics, Applied; Physics, Condensed Matter. **Q1, IF 5.155**
- C56 V. Soare, M. Burada, I. Constantin, M. Ghita, V. Constantin, **F. Miculescu**, A.M. Popescu, Synthesis and performance of Zn-Ni-P thin films, Chinese Physics B, Vol. 24 (3), 2015, Document Type: Article, Article number 036101, DOI: 10.1088/1674-1056/24/3/036101, WOS:000351056400041, ISSN: 16741056. Web of Science Categories: Physics, Multidisciplinary, **Q3, IF 1.469**
- C57 **F. Miculescu**, A. Purcaru, M. Miculescu, LT. Ciocan, SI Voicu, Hydroxyapatite induced microstructure by cooling rate modification of cancellous bone thermal treatment, Journal of Optoelectronics and Advanced Materials, Vol. 17(7-8), 2015, Pages: 1219-1224, Document Type: Article, WOS:000359967600048, ISSN: 1454-4164. Web of Science Categories: Materials Science, Multidisciplinary, **Autor principal Q4, IF 0.588**
- C58 M. Tarcolea, V. Hancu, **F. Miculescu**, O. Smatrea, C. Coman, RM. Comaneanu, A. Ormenisan, Research on Microstructural and Chemical Inhomogeneity in Cast Metal Crowns Made of CoCrMoW Alloy, Revista de chimie, Vol. 66(8), 2015, Pag. 1143-1146, Document Type: Article, WOS: 000361124600012, ISSN: 0034-7752. Web of Science Categories: Chemistry, Multidisciplinary, **Q4, IF 1.605**
- C59 MS. Corobeia, MG. Albu, R. Ion, A. Cimpean, **F. Miculescu**, IV. Antoniac, V. Raditoiu, I. Sirbu, M. Stoenescu, SI. Voicu, MV. Ghica, Modification of titanium surface with collagen and doxycycline as a new approach in dental implants, Journal of Adhesion Science and Technology, Vol. 29(23), Pag. 2537-2550, 2015, Document Type: Article, DOI: 10.1080/01694243.2015.1073661, WOS: 000360620800003, ISSN: 0169-4243. Web of Science Categories: Materials Science, Multidisciplinary, **Q3, IF 1.121**
- C60 **F. Miculescu**, I. Jepu, GE. Stan, M. Miculescu, SI. Voicu, C. Cotrut, TM. Pisu, S. Ciucu, Tailoring the electric and magnetic properties of submicron-sized metallic multilayered systems by TVA atomic inter-diffusion engineered processes, Applied Surface Science, 2015, Volume: 358, Pages: 619-626, Part: B, DOI: 10.1016/j.apsusc.2015.08.247, WOS:000366220500016, ISSN: 01694332. Web of Science Categories: Chemistry, Physical; Materials Science, Coatings & Films; Physics, Applied; Physics, Condensed Matter. **Principal author Q1, IF 5.155**
- C61 V. Hancu, R.M. Comaneanu, C. Coman, M. Tarcolea, H.M. Barbu, A. Bechir, **F. Miculescu**, A. Lorean, Microstructure and Chemical Homogeneity of Cast Dental Crowns Made from CoCrMoW Alloy and Ceramic Mass, REVISTA DE CHIMIE, Volume: 66, Issue: 9, Pages: 1327-1330, 2015, WOS: 000363359700015, ISSN: 0034-7752. Web of Science Categories: Chemistry, Multidisciplinary, **Q3, IF 1.605**
- C62 **F. Miculescu**, A. Maidaniuc, S.I. Voicu, M. Miculescu, A. Berbecaru, L.T. Ciocan, A. Purcaru, A. Semenescu, O. Preda, Structural and morphological induced modifications in hydroxyapatite obtained by bone thermal treatments, Journal of Optoelectronics and Advanced Materials , Volume: 17, Issue: 9-10, Pages: 1361-1366, 2015, WOS:000364600400021, ISSN: 1454-4164, Web of Science Categories: Chemistry, Multidisciplinary, **Q4, Principal author IF 0.588**
- C63 Duta, L., Stan, G.E., Popa, A.C., Husanu, M.A., Moga, S., Socol, M., Zgura, I., **Miculescu, F.**, Urzica, I., Popescu, A.C., Mihailescu, I.N. Thickness influence on in vitro biocompatibility of titanium nitride thin films synthesized by pulsed laser deposition, Materials, 9(1), pag. 38, DOI: 10.3390/ma9010038, WOS:000372095300024, ISSN: 1996-1944, 2016. Web of Science Categories: Materials Science, **Q2, IF 2.972**
- C64 Dinu, M., Pana, I., Braic, V., **Miculescu, F.**, Balaceanu, M., Vladescu, A., Braic, M., In vitro corrosion resistance of Si containing multi-principal element carbide coatings, Materials and Corrosion, 67(9), pag. 908-914, DOI: 10.1002/maco.201508788, WOS:000383643100001, ISSN: 0947-5117, 2016. Web of Science Categories: Metallurgy & Metallurgical Engineering, **Q2, IF=1,458**
- C65 Corobeia, M.C., Muhuleti, O., **Miculescu, F.**, Antoniac, I.V., Vuluga, Z., Florea, D., Vuluga, D.M., Butnaru, M., Ivanov, D., Voicu, S.I., Thakur, V.K., Novel nanocomposite membranes from cellulose acetate and clay-silica nanowires, Polymers for Advanced Technologies, 27(12), pag. 1586-1595, DOI: 10.1002/pat.3835, WOS:000387663300005, ISSN: 1042-7147, 2016. Web of Science Categories: Polymer Science, **Q2, IF=2.162**
- C66 Voicu, S.I., Condruz, R.M., Mitran, V., Cimpean, A., **Miculescu, F.**, Andronescu, C., Miculescu, M., Thakur, V.K., Sericin Covalent Immobilization onto Cellulose Acetate Membrane for Biomedical Applications, ACS Sustainable Chemistry and Engineering, 4(3), pag. 1765-1774, DOI: 10.1021/acssuschemeng.5b01756, WOS:000371755400134, ISSN: 2168-0485, 2016. Web of Science Categories: Chemistry, Multidisciplinary, **Q1, IF=6.97**
- C67 Miculescu, M., Thakur, V.K., **Miculescu, F.**, Voicu, S.I., Graphene-based polymer nanocomposite

- membranes: a review, *Polymers for Advanced Technologies*, 27(7), pag. 844-859, DOI: 10.1002/pat.3751, WOS:000378733400001, ISSN: 1042-7147, 2016. Web of Science Categories: Polymer Science, **Q2, IF=2.162**
- C68 A Maidaniuc, M. Miculescu, S.I. Voicu, L.T. Ciocan, M. Niculescu, M.C. Corobeia, M.E. Rada, **F. Miculescu**, Effect of micron sized silver particles concentration on the adhesion induced by sintering and antibacterial properties of hydroxyapatite microcomposites, *Journal of Adhesion Science and Technology*, Volume 30, Issue 17, 2016, Pages 1829-1841, DOI: 10.1080/01694243.2016.1163808; WOS:000374585600001; ISSN: 0169-4243. Web of Science Categories: Materials Science, Multidisciplinary, **Q3, Principal author IF=1.121**
- C69 I.N. Mihailescu, D. Bociaga, G. Socol, G.E. Stan, M.C. Chifiriuc, C. Bleotu, M.A. Husanu, G. Popescu-Pelin, L. Duta, C.R. Luculescu, I. Negut, C. Hapenciuc, C. Besleaga, I. Zgura, **F. Miculescu**, Fabrication of antimicrobial silver-doped carbon structures by combinatorial pulsed laser deposition, *International Journal of Pharmaceutics*, Volume: 515, Issue: 1-2, Pages: 592-606, 2016, DOI: 10.1016/j.ijpharm.2016.10.041; WOS:000389150700060; ISSN: 0378-5173. Web of Science Categories: Pharmacology & Pharmacy, **Q1, IF=4.213**
- C70 **F. Miculescu**, A.C. Mocanu, C.A. Dascalu , A. Maidaniuc, D. Batalu, A. Berbecaru, S.I. Voicu, M. Miculescu, V. Kumar Thakur, L.T. Ciocan, Facile synthesis and characterization of hydroxyapatite particles for high value nanocomposites and biomaterials, *Vacuum*, DOI: 10.1016/j.vacuum.2017.06.008, WOS:000416184600080, ISSN: 0042-207X. Web of Science Categories: Materials Science, Multidisciplinary, **Q2, IF=2.515**
- C71 A.M. Pandele, F.E. Comanici, C.A. Carp, **F. Miculescu**, S.I. Voicu, V.K. Thakur, B.C. Serban, Synthesis and characterization of cellulose acetate-hydroxyapatite micro and nano composites membranes for water purification and biomedical applications, *Vacuum*, DOI: 10.1016/j.vacuum.2017.05.008; WOS:000416184600078, ISSN: 0042-207X. Web of Science Categories: Materials Science, Multidisciplinary, **Q2, IF=2.515**
- C72 I.N. Mihailescu, D. Bociaga, G. Popescu-Pelin, G.E. Stan, L. Duta, G. Socol, M.C. Chifiriuc, C. Bleotu, V. Lazar, M.A. Husanu, I. Zgura, **F. Miculescu**, I. Negut, C. Hapenciuc, Optimized silicon reinforcement of carbon coatings by pulsed laser technique for superior functional biomedical surfaces fabrication, *Bioabration*, Volume: 9, Issue: 2, 2017, DOI: 10.1088/1758-5090/aa7076; WOS:000402913700006, ISSN: 1758-5082. Web of Science Categories: Materials Science, Biomaterials, **Q1, IF=7.236**
- C73 P. Neacsu, A.I. Staras, S.I. Voicu, I. Ionascu, T. Soare, S. Uzun, V.D. Cojocaru, A.M. Pandele, S.M. Croitoru, **F. Miculescu**, C.M. Cotrut, I. Dan, A. Cimpean, Characterization and in vitro and in vivo assessment of a novel cellulose acetate-coated Mg-based alloy for orthopedic applications, *Materials*, Volume 10, Issue 7, 2017, Article number 686, DOI: 10.3390/ma10070686, WOS:00040668300003, ISSN: 1996-1944. Web of Science Categories: Materials Science, **Q2, IF 2.972**
- C74 **F. Miculescu**, A. Maidaniuc, Sl. Voicu, VK. Thakur, GE. Stan, LT. Ciocan, Progress in Hydroxyapatite-Starch Based Sustainable Biomaterials for Biomedical Bone Substitution Applications, *ACS SUSTAINABLE CHEMISTRY & ENGINEERING*, Volume: 5, Issue: 10, Pages: 8491-8512, DOI: 10.1021/acssuschemeng.7b02314, 2017, WOS:000412382700002, ISSN: 2168-0485, Web of Science Categories: Chemistry, Multidisciplinary; Green & Sustainable Science & Technology; Engineering, Chemical **Q1, Principal author IF 6.97**
- C75 K. Earar, S. Gradiñaru, G. Pariza, **F. Miculescu**, A. Antoniac, VD. Cojocaru, A. Mohan, G. Pintilie, DO. Grigorescu, Effect of the Sterilization Procedures of Different Surgical Meshes for Abdominal Surgery, *REVISTA DE CHIMIE*, Volume: 68, Issue: 8, Pages: 1868-1873, 2017, WOS:000410388000040, ISSN: 0034-7752, Web of Science Categories: Chemistry, Multidisciplinary; Engineering, Chemical **Q2, IF 1.605**
- C76 C. Dumitriu, Sl. Voicu, A. Muhulet, G. Nechifor, S. Popescu, C. Ungureanu, A. Carja, **F. Miculescu**, R. Trusca, C. Pirvu, Production and characterization of cellulose acetate - titanium dioxide nanotubes membrane fraxiparinized through polydopamine for clinical applications, *CARBOHYDRATE POLYMERS*, Volume: 181, Pages: 215-223, DOI: 10.1016/j.carbpol.2017.10.082, 2018, Web of Science Categories: Chemistry, Applied; Chemistry, Organic; Polymer Science, WOS:000418661000027, ISSN: 0144-8617. **Q1, IF 6.044**
- C77 M. Ioniță, LE. Crică, Sl. Voicu, S. Dinescu, **F. Miculescu**, M. Costache, H. Iovu, Synergistic effect of carbon nanotubes and graphene for high performance cellulose acetate membranes in biomedical applications, *CARBOHYDRATE POLYMERS*, Volume 183, Pages 50-61, 2018, DOI: 10.1016/j.carbpol.2017.10.095, WOS:000423715000006, Web of Science Categories: Chemistry, Applied; Chemistry, Organic; Polymer Science, ISSN: 0144-8617. **Q1 IF 6.044**
- C78 A Maidaniuc, **F. Miculescu**, S.I. Voicu, C. Andronescu, M. Miculescu, E. Matei, A.C. Mocanu, I. Pencea, I. Csaki, T. Machedon-Pisu, L.T. Ciocan, Induced wettability and surface-volume correlation of composition for bovine bone derived hydroxyapatite particles, *Applied Surface Science*, Volume: 438, Pages: 158-166 DOI: 10.1016/j.apsusc.2017.07.074; WOS:000425731200017, ISSN: 0169-4332, 2018, Web of Science Categories: Chemistry, Physical; Materials Science, Coatings & Films; Physics, Applied; Physics, Condensed Matter, **Q1, Principal author IF 5.155**

- C79 **F. Miculescu**, A.C. Mocanu, G.E. Stan, M. Miculescu, A. Maidaniuc, A. Cîmpean, V. Mitranc, S.I. Voicu, T. Machedon-Pisu, L.T. Ciocan, Influence of the modulated two-step synthesis of biogenichydroxyapatite on biomimetic products' surface, *Applied Surface Science*, Volume: 438, Pages: 147-157, DOI: 10.1016/j.apsusc.2017.07.144, WOS:000425731200016, ISSN: 0169-4332, 2018, Web of Science Categories: Chemistry, Physical; Materials Science, Coatings & Films; Physics, Applied; Physics, Condensed Matter, **Q1, Principal author IF 5.155**
- C80 AM. Pandele, P. Neacsu, A. Cimpean, Al. Staras, **F. Miculescu**, A. Iordache, Sl. Voicu, VK. Thakur, OD. Toader, Cellulose acetate membranes functionalized with resveratrol by covalent immobilization for improved osseointegration, *Applied Surface Science*, Volume: 438, Pages: 2-13 2018, DOI: 10.1016/j.apsusc.2017.11.102, WOS:000425731200002, Web of Science Categories: Chemistry, Physical; Materials Science, Coatings & Films; Physics, Applied; Physics, Condensed Matter, **Q1, Principal author IF 5.155**
- C81 L. Duta, C. Ristoscu, GE. Stan, MA. Husanu, C. Besleaga, MC. Chifiriuc, V. Lazar, C. Bleotu, **F. Miculescu**, N. Mihailescu, E. Axente, M. Badiceanu, D. Bociaga, IN. Mihailescu, New bio-active, antimicrobial and adherent coatings of nanostructured carbon double-reinforced with silver and silicon by Matrix-Assisted Pulsed Laser Evaporation for medical applications, *APPLIED SURFACE SCIENCE*, Volume: 441, Pages: 871-883, DOI: 10.1016/j.apsusc.2018.02.047, 2018, WOS:000427816400102, ISSN: 0169-4332, Web of Science Categories: Chemistry, Physical; Materials Science, Coatings & Films; Physics, Applied; Physics, Condensed Matter, **Q1, IF 5.155**
- C82 V. Mitran, R. Ion, **F. Miculescu**, M.G. Necula, A.C. Mocanu, G.E. Stan, I.V. Antoniac, A. Cimpean, steoblast cell response to naturally derived calcium phosphate-based materials, *Materials*, Vol. 11, Iss. 7, 2018, Article number 1097, WOS:000442117300048, ISSN: 19961944, DOI: 10.3390/ma11071097, **Q2 Principal author IF 2.972**
- C83 A Gaspar-Pintilieescu, A.M. Seciu, **F. Miculescu**, L. Moldovan, E. Ganea, O. Craciunescu, Enhanced extracellular matrix synthesis using collagen dressings loaded with Artemisia absinthium plant extract, *Journal of Bioactive and Compatible Polymers*, 2018, ISSN: 08839115, DOI: 10.1177/0883911518783216. **Q3, IF 1.976**
- C84 Pencea, I; Turcu, RN; **Miculescu, F**; Predescu, C; Comanescu, B, Studies Concerning the Usage of the Intrinsic Morphological and Chemical Features of Some Common and Document Paper Types as Security Items, *REVISTA DE CHIMIE*, Volume: 69, Issue: 11, Pages: 3090-3096, WOS:000451931500028, ISSN: 0034-7752, 2018. **Q3, IF 1.605**
- C85 **Miculescu F**, Maidaniuc A, Miculescu M, Batalu N.D., Ciocoiu R.C., Voicu S.I., Stan G.E., Thakur V.K., Synthesis and Characterization of Jellified Composites from Bovine Bone-Derived Hydroxyapatite and Starch as Precursors for Robocasting, *ACS Omega*, Volume: 3, Pages: 1338–1349, 2018, DOI: 10.1021/acsomega.7b01855, WOS:000427933200143, ISSN: 2470-1343, **Q2, IF 2.584**
- C86 Mocanu, AC; Stan, GE; Maidaniuc, A; Miculescu, M; Antoniac, IV; Ciocoiu, RC; Voicu, Sl; 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, Article Number: 381, DOI: 10.3390/ma12030381, WOS:000460768000050, ISSN: 1996-1944, 2019. (Corresponding Author) **Q2, IF 2.972**
- C87 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, Article Number: 719, DOI: 10.3390/ma12050719, WOS:000462543700035, ISSN: 1996-1944, 2019. **Q2, IF 2.972**
- C88 Antoniac, IV; Stoia, DL; Ghiban, B; Tecu,; **Miculescu, F**; Vigaru, C; Sacleanu, V, Failure Analysis of a Humeral Shaft Locking Compression PlateSurface Investigation and Simulation by Finite Element Method, *MATERIALS*, Volume: 12, Issue: 7, Article Number: 1128, DOI: 10.3390/ma12071128, WOS:000465500700127, ISSN: 1996-1944, 2019. **Q2, IF 2.972**
- C89 Karlssdottir, SN; Csaki, I; Antoniac, IV; Manea, CA; Stefanou, R; Magnus, F; **Miculescu, F**, Corrosion behavior of AlCrFeNiMn high entropy alloy in a geothermal environment, *GEO THERMICS*, Volume: 81, Pages: 32-38, DOI: 10.1016/j.geothermics.2019.04.006, WOS:000472689800003, ISSN: 0375-6505, eISSN: 1879-3576, 2019. **Q1, IF 3.47**
- C90 Mocanu, AC; Miculescu, M; Machedon-Pisu, T; Maidaniuc, A; Ciocoiu, RC; Ionita, M; Pasuk, J; Stan, GE; **Miculescu F**, Internal and external surface features of newly developed porous ceramics with random interconnected 3D channels by a fibrous sacrificial porogen method, *APPLIED SURFACE SCIENCE*, Volume: 489, Pages: 226-238, DOI: 10.1016/j.apsusc.2019.05.354, WOS:000474530600024, ISSN: 0169-4332, eISSN: 1873-5584, 2019. (Corresponding Author) **Q1, IF 5.155**

- C91 Dascălu, CA; Maidaniuc, A; Pandele AM; Voicu, SI; Machedon-Pisu, T; Stan, GE; Cîmpean, 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, Pages: 335–352, DOI: 10.1016/j.apsusc.2019.07.098, WOS: ISSN: 0169-4332, eISSN: 1873-5584, 2019. Q1 (Corresponding Author) **Q1, IF 5.155**
- C92 Dascalu, CA; Miculescu, F; Mocanu, AC; Constantinescu, AE; Butte, TM; Pandele, AM; Ciocoiu, RC; Voicu, SI; Ciocan, LT; Novel Synthesis of Core-Shell Biomaterials from Polymeric Filaments with a Bioceramic Coating for Biomedical Applications, COATINGS, Volume: 10 Issue: 3, Article Number: 283, DOI: 10.3390/coatings10030283, Document Type:Article, WOS:000524211800088, eISSN: 2079-6412, 2020, (Corresponding Author) **Q2, IF 2.33**
- C93 Pandele, AM; Constantinescu, A; Radu, IC; **Miculescu, F**; Voicu, SI; Ciocan, LT, Synthesis and Characterization of PLA-Micro-structured Hydroxyapatite Composite Films, MATERIALS, Volume: 13 Issue: 2, Article Number: 274, DOI: 10.3390/ma13020274, Document Type:Article, WOS:000515499900021, eISSN: 1996-1944, 2020. **Q2, IF 2.972**
- C94 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, DOI: 10.3390/ma13020263, Document Type:Article; Proceedings Paper, WOS:000515499900010, eISSN: 1996-1944, 2020. **Q2, IF 2.972**
- C95 Muhulet, A; Tuncel, C; **Miculescu, F**; Pandele, AM; Bobirica, C; Orbeci, C; Bobirica, L; Palla-Papavlu, A; Voicu, SI, Synthesis and characterization of polysulfone-TiO<sub>2</sub> decorated MWCNT composite membranes by sonochemical method, APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING, Volume: 126 Issue: 3, Article Number: 233, DOI: 10.1007/s00339-020-3408-9, WOS:000516564000001, ISSN: 0947-8396, eISSN: 1432-0630, 2020. **Q3, IF 1.784**
- C96 Maidaniuc, A; **Miculescu, F**; Ciocoiu, RC; Butte, TM; Pasuk, I; Stan, GE; Voicu, SI; Ciocan, LT, Effect of the processing parameters on surface, physico-chemical and mechanical features of bioceramics synthesized from abundant carp fish bones, CERAMICS INTERNATIONAL, Volume: 46 Issue: 8 Pages: 10159-10171 Part: A, DOI: 10.1016/j.ceramint.2020.01.007, Document Type: Article, WOS:000528481900023, ISSN: 0272-8842, eISSN: 1873-39562020, 2020. (Corresponding Author) **Q1, IF = 3.45**

#### ISI Clarivate Indexed articles

- C97 M.M. Sovar, E. Aldea, V. Mitran, **F. Miculescu**, I. Demetrescu, *Cell Growth on TiAlNb Alloy as a Function of Bioactivation Method*, Editors: Daculsi G; Layrolle P, Bioceramics, Vol 20, Pts 1 And 2 Book Series: Key Engineering Materials, Vol. 361-363, Pag. 1131-1134, Part 1-2, Document Type: Proceedings Paper. Web of Science Categories: Materials Science, Multidisciplinary; Materials Science, Coatings & Films, WOS:000253480200279, ISBN: 978-0-87849-344-9, ISSN: 1013-9826, 2008.
- C98 M. Prodana, R. Luca, **F. Miculescu**, D. Bojin, *A New Approach in Evaluation Surface Properties of Natural Temporary Teeth from High Polluted Area*, Key Engineering Materials, Vol. 415, Pag. 21-24, Document Type: Proceedings Paper. Web of Science Categories: Materials Science, Multidisciplinary, WOS:000278916000006. ISSN: 1013-9826, 2009.
- C99 E. Albert, M. Muntean, A. Ianculescu, **F. Miculescu**, B. Albert, *Special Ceramic Material Based on Basaltic-Andesite for Extreme Environments*, Advanced Materials Research Vol.59, Pag. 39-41, Document Type: Proceedings Paper. Web of Science Categories: Materials Science, Multidisciplinary; WOS:000265407900004, ISBN: 978-0-87849-344-9, ISSN: 1022-6680, 2009.
- C100 B. Ghiban, I. Bordeasu, N. Ghiban, A. Semenescu, **F. Miculescu**, A. Ghiban, *Structural Features of Cavitation Damages in Some Stainless Steel*, Annals of DAAAM Proceedings, Vol. 20, Pag. 1561-1562, Document Type: Proceedings Paper. Web of Science Categories: Engineering, Manufacturing, WOS:000282335600781, ISBN: 978-3-901509-70-4, ISSN: 1726-9679, 2009.
- C101 R.M. Comăneanu, D.L. Ghergic, O. Smătrea, D. Vlăsceanu, **F. Miculescu**, M. Tărcolea, *Microscopic (SEM, EDX) investigations on a new material/implant for dental use*, Annals of DAAAM & Proceedings of the 20<sup>th</sup> International Symposium, Vol. 20. Pag. 1597-1598, Document Type: Proceedings Paper. Web of Science Categories: Engineering, Manufacturing, WOS:000282335600799, ISBN: 978-3-901509-70-4, ISSN 1726-9679, 2009.
- C102 A. Ghiban, B. Ghiban, C.M. Bortun, N. Ghiban, F. Miculescu, P. Moldovan, Intermetallic Phases in New CoCrMoTi Dental Alloy, MEDIMOND, 24th European Conference on Biomaterials, Pag. 47-52, Document Type: Proceedings Paper. Web of Science Categories: Engineering, Biomedical; Materials Science, Biomaterials, WOS:000319162200009, ISBN: 978-88-7587-630-2, 2011.
- C103 M. Branzei, I. Plotog, **F. Miculescu**, G. Varzaru, P. Svasta, A. Thumm, *Solder joints properties as function of*

- multiple reflow vapor phase soldering process*, Proceedings of the International Spring Seminar on Electronics Technology, Art.No. 6273127, Pag. 155-160; Source Type: Conference Proceeding. Document Type: Conference Paper. DOI 10.1109/ISSE.2012.6273127, WOS:000374111700030, ISSN 21612528, ISBN 9781467322409, 2012.
- C104 **F. Miculescu**, L.T. Ciocan, M. Miculescu, A. Ernuteanu, I.V. Antoniac, E. Matei, I. Pencea, *A Study on Trace Elements Concentration in Bone Particles by XRF Analysis*, Diffusion and Defect Data Pt.B: Solid State Phenomena, Vol. 188, Pag. 37-40, Document Type: Proceedings Paper. DOI: 10.4028/www.scientific.net/SSP.188.37, Web of Science Categories: Materials Science, Multidisciplinary; WOS:000308047400007, ISSN: 1012-0394 ISBN: 9783037853917, 2012.
- C105 M. Bane, **F. Miculescu**, A.I. Blajan, M. Dinu, I.V. Antoniac, *Failure Analysis of Some Retrieved Orthopedic Implants Based on Materials Characterization*, Diffusion and Defect Data Pt.B: Solid State Phenomena, Vol.188, Pag. 114-177, Document Type: Proceedings Paper. DOI: 10.4028/www.scientific.net/SSP. 188.114, Web of Science Categories: Materials Science, Multidisciplinary; WOS:000308047400021, ISSN: 1012-0394 ISBN: 9783037853917, 2012.
- C106 M. Branzei, **F. Miculescu**, A. Bibis, I. Cristea, I. Plotog, G. Varzaru, B. Mihailescu, Lead/Lead Free Solder Joints Comparative Electrical Tests as Function of Microstructure and Soldering Thermal Profile, 2013 IEEE 19TH International Symposium for Design and Technology in Electronic Packaging (SIITME), Pag. 255-258, Document Type: Proceedings Paper, Web of Science Categories: Engineering, Electrical & Electronic, WOS:000347562900045, ISBN:978-1-4799-1555-2.
- C107 M. Branzei, I. Pencea, I. Plotog, **F. Miculescu**, I. Cristea, A. Thumm, The Mischmetal and Bi94Zn6 Effect Alloying on SACX 0307, 2013 Proceedings of the 36th International Spring Seminar on Electronics Technology (ISSE), Book Series: International Spring Seminar on Electronics Technology ISSE, Pag. 24-29, 2013, Web of Science Categories: Engineering, Electrical & Electronic, Document Type: Proceedings Paper, WOS:000374113900005, ISBN:978-1-4799-0036-7, ISSN: 2161-2528.
- C108 **F. Miculescu**, L.T. Ciocan, M. Miculescu, D. Meghea, M. Bane, M. Brânzei, Implant surface finishing influence on tissue-implant anchoring , Vol. 216, Pag. 39-44, 5th International Conference on Advanced Materials and Structures, AMS 2013; Timisoara, Solid State Phenomena Code 107496, Source Type: Book series, DOI: 10.4028/ www.scientific.net/ SSP.216.39, Document Type: Conference Paper, WOS:000347924100007, ISSN: 10120394 ISBN: 978-303835212-9, 2014.
- C109 M. Miculescu, M. Branzei, **F. Miculescu**, D. Meghea, M.Bane, A study on metal-ceramic thermal expansion compatibility, Solid State Phenomena, Vol. 216, Pag. 85-90, 5th International Conference on Advanced Materials and Structures, AMS 2013; Timisoara; Code 107496, Source Type: Book series, DOI: 10.4028/www.scientific.net/ SSP.216.85, Document Type: Conference Paper, ISSN: 10120394 ISBN: 978-303835212-9 CODEN: DDBPE, 2014.
- C110 M. Miculescu, R. Vlăsceanu, F. Baciu, **F. Miculescu**, Study on the metal-ceramic bonding strength improvement by unconventional methods, UPB Scientific Bulletin, Series B: Chemistry and Materials Science, Volume 78, Issue 1, Pag. 193-200, ISSN: 14542331, CODEN: SBPSF, Document Type: Article, Indexat SCOPUS, 2016.
- C111 A Maidaniuc, **F. Miculescu**, A.C. Mocanu, S.I. Voicu, M. Miculescu, A. Purcaru, A. Muhuleț, C. Pop, M.E. Rada, Sinterability study of bovine-derived hydroxyapatite and silver microcomposites, UPB Scientific Bulletin, Series B: Chemistry and Materials Science, Volume 79, Issue 1, 2017, Pages 145-154, Web of Science Categories: Materials Science, WOS:000405772200015, ISSN:1454-2331. **Principal author**
- C112 Luta, C; Soare, M; Mocanu, AC; Maidaniuc, A; Eanu, AE; **F. Miculescu**, Comprehensive Nondestructive Testing of Implants for Orthopedic Applications, University Politehnica of Bucharest Scientific Bulletin Series B-Chemistry and Materials Science, Volume: 80, Issue: 3, Pages: 159-174, WOS:000440890800014, ISSN: 1454-2331, 2018. **Principal author**
- C113 A Muhuleț, **F. Miculescu**, S.I. Voicu, F. Schütt, V.K. Thakur, Y.K. Mishra, Fundamentals and scopes of doped carbon nanotubes towards energy and biosensing applications, Materials Today Energy, Vol. 9, Pag. 154-186, 2018, WOS:000443217900013, ISSN: 24686069, DOI: 10.1016/j.mtener.2018.05.002. **Principal author**
- C114 Manea, CA; Csaki, I; Geambazu, LE; **F. Miculescu**, Petrescu, MI; Fanicchia, F ( ; Sohaciu, M; Rosu, L, HfNbTaTiZr high entropy alloy processed by mechanical alloying, University Politehnica of Bucharest Scientific Bulletin Series B-Chemistry and Materials Science, Vol. 81, Iss. 3, Pag. 201-208, WOS:000487215400020, ISSN: 1454-2331, 2019.

#### Internationally recognized journals (indexed in other International Databases)

- C1.1. C. Ittu, N. Constantin, **F. Miculescu**, P. Ene, P. Aioanei, M. Munteanu, Covering powder for continuous casting steel, Modeling of Casting, Welding and Advanced Solidification Processes – XI, Volume 2, 2006, Pages 1147-1154, Modeling of Casting, Welding and Advanced Solidification Processes - XI; Opio; France;

- Code 68706, ISBN: 0873396294; 978-087339629-5, Indexat SCOPUS, Document Type: Conference Paper, 2006.
- C1.2. G. Popescu, P. Moldovan, S. Bejan, M. Miculescu, **F. Miculescu**, *Thermophysical properties and microstructural analysis of AZ80 magnesium alloys designed for automotive industry*, Materials Science and Technology Conference and Exhibition, MS and T'08, Vol. 2, Pag. 1222-1229, Proceeding. Document Type: Conference Paper. Materials Science and Technology Conference and Exhibition, MS and T'08; Pittsburgh, PA; United States; Code 75829. Indexat SCOPUS. ISBN: 9781605606217, 2008.
- C1.3. M. Miculescu, G. Coșmeleată, M. Brânzei, **F. Miculescu**, Thermal diffusivity of materials using flash method applied on CoCr alloys, UPB Scientific Bulletin, Series B: Chemistry and Materials Science, Volume 70, Issue 2, 2008, Pages 71-80, ISSN: 14542331, CODEN: SBPSF, Indexat SCOPUS, Document Type: Article, 2008.
- C1.4. M. Branzei, P. Svasta, **F. Miculescu**, M. Miculescu, I. Plotog, *Correlation between the thermophysical properties, geometry and microstructure of the SAC305 and SAC-X typical solder joints*, SIITME 2009 - 15th International Symposium for Design and Technology of Electronics Packages, Art.No. 5407386, Pag. 129-133, Document Type: Conference Paper. 15th International Symposium for Design and Technology of Electronics Packages, SIITME 2009; Gyula; Hungary; Category number CFP0907I-CDR; Code 79485, DOI: 10.1109/SIITME.2009.5407386, Indexat SCOPUS. ISBN: 9781424451333, 2009.
- C1.5. I. Demetrescu, D. Ionita, C. Pirvu, D. Portan, C. Manole, **F. Miculescu**, A. Cimpan, *Aspects of correlation between structures, properties and bioapplications of TiO<sub>2</sub> nanotubes*, 2009 3rd ICTON Mediterranean Winter Conference, ICTON-MW 2009, Art.No. 5385642, Document Type: Conference Paper. 2009 3rd ICTON Mediterranean Winter Conference, ICTON-MW 2009; Angers; France; Category number CFP0933D-USB; Code 79652, DOI: 10.1109/ICTONMW.2009.5385642, Indexat SCOPUS. ISBN: 978-142445746-5, 2009.
- C1.6. I. Plotog, P. Svasta, J. Villain, Z. Illyefalvi-Vitez, A. Pietrikova., M. Branzei, **F. Miculescu**, D. Constantinescu, C. Balan, T. Cucu, G. Varzaru, *HISOLD 4P Q&R, COST project for solder material innovations and solder joint properties assessment*, SIITME 2009 - 15th International Symposium for Design and Technology of Electronics Packages, Art.No. 5407395, Pag. 87-92, Document Type: Conference Paper. 15th International Symposium for Design and Technology of Electronics Packages, SIITME 2009; Gyula; Hungary; Category number CFP0907I-CDR; Code 79485, DOI: 10.1109/SIITME.2009.5407395, Indexat SCOPUS. ISBN: 9781424451333, 2009.
- C1.7. E. Mircea, C. Zaharia, C. Cincu, **F. Miculescu**, G. Hubcă, C.N. Degeratu, *Natural Fibers Modified by Chemical Methods for Application in Bone Pathology*, UPB Scientific Bulletin, Series B: Chemistry and Materials Science, Vol. 72, Iss. 4, pag. 155-172, CODEN: SBPSF, Document Type: Article, Indexat SCOPUS. ISSN 1454-2331, 2010.
- C1.8. A. Bechir, R.M. Comaneanu, O. Smatreanu, D.L. Ghergic, M. Tarcolea, **F. Miculescu**, Microscopic studies regarding the causes of micro-fractures in an aesthetic dental bridge, International Journal of Nano and Biomaterials, Vol. 3, ISS. 4, Pag. 382-391, Document Type: Article. Indexat SCOPUS. DOI: 10.1504/IJNBM.2011.045887, ISSN: 17528933, 2011.
- C1.9. C. Zaharia, T. Zecheru, L. Lerescu, M.R. Tudora, **F. Miculescu**, C. Cincu, Triiodophenyl acrylate-based microbeads find important use in the medical field, International Journal of Nano and Biomaterials, Vol. 3, ISS. 4, Pag. 302-315, Document Type: Article. Indexat SCOPUS. DOI: 10.1504/IJNBM.2011.045888, ISSN: 1752-8933, 2011.
- C1.10. **F. Miculescu**, I.V. Antoniac, L.T. Ciocan, M. Miculescu, M. Branzei, A. Ernuteanu, D. Batalu, A. Berbecaru, Complex analysis on heat treated human compact bones, UPB Scientific Bulletin, Series B: Chemistry and Materials Science, Vol. 73, Iss. 4, Pag. 203-212, Document Type: Article. Indexat SCOPUS. ISSN 1454-2331, 2011.
- C1.11. I. Plotog, T. Cucu, B. Mihailescu, P. Svasta, M. Branzei, M. Tarcolea, **F. Miculescu**, A. Thumm., A. Flechtmann, *Solder joints properties assessment in the terms of 4P Soldering Model*, 2011 IEEE 17th International Symposium for Design and Technology of Electronics Packages, SIITME 2011 Document Type: Conference Paper. Art.No. 6102710, Pag. 163-168, 2011 IEEE 17th International Symposium for Design and Technology of Electronics Packages, SIITME 2011; Timisoara; Romania; 20 October 2011 through 23 October 2011; Category number CFP1107I-USB; Code 88067, DOI: 10.1109/SIITME.2011.6102710, Indexat SCOPUS. ISBN 9781457712753, 2011.
- C1.12. G. Iacob, G. Popescu, **F. Miculescu**, M. Buzatu, Obtaining and Characterization of Al/Al<sub>2</sub>O<sub>3</sub> 3/Gr Composites by Mechanical Alloying, UPB Scientific Bulletin, Series B: Chemistry and Materials Science, Vol.74, Iss. 2, Pag. 221-230, Document Type: Article. Indexat SCOPUS. CODEN: SBPSF, ISSN: 1454-2331, 2012.
- C1.13. M.D. Vraneanu, R. Saban, I.V. Antoniac, M. Albu, **F. Miculescu**, Development and characterization of novel porous collagen based biocomposite for bone tissue regeneration, UPB Scientific Bulletin, Series B: Chemistry and Materials Science, Vol. 74, Iss. 3, Pag. 145-156, Document Type: Article. Indexat SCOPUS. CODEN: SBPSF, ISSN: 1454-2331, 2012
- C1.14. M. Mânzână, B. Ghiban, M. Marin, N. Ghiban, I. Bordeaşu, S. Mitrea, **F. Miculescu**, Concerning the damage of

- stainless steels by cavitation erosion, UPB Scientific Bulletin, Series B: Chemistry and Materials Science, Volume 74, Issue 4, 2012, Pages 223-236, ISSN: 14542331, CODEN: SBPSF, Indexat SCOPUS Document Type: Article, 2012.
- C1.15. **F. Miculescu**, L.T. Ciocan, D. Meghea, M. Miculescu, Morphologic characterization of ceramic-ceramic dental systems failure, Key Engineering Materials, Vol. 614, Pag. 140-143, 25th Symposium and Annual Meeting of the International Society for Ceramics in Medicine, ISCM 2013; Bucharest, Source Type: Book series, DOI: 10.4028/www.scientific.net/ KEM.614.140, Document Type: Conference Paper, ISSN: 10139826 ISBN: 978-303835128-3, CODEN: KEMAE, Indexat SCOPUS 2014.
- C1.16. Al. Blajan, **F. Miculescu**, I. Ciucă, C. Cotrut, A. Semenescu, I. Antoniac, Effect of calcium content on the microstructure and degradation of Mg-Ca binary alloys potentially used as orthopedic biomaterials, Key Engineering Materials, Vol. 638, 2014, Pages 104-108, CODEN: KEMAE, Code 118479, DOI: 10.4028/www.scientific.net/KEM.638.104, Document Type: Conference Paper, ISSN: 10139826 ISBN: 978-303835432-1, Indexat SCOPUS, 2014.
- C1.17. **F. Miculescu**, LT. Ciocan, M. Miculescu, A. Mocanu, A. Maidaniuc, A. Purcaru, O. Preda, Micro-analytical comparison on elemental composition of nonstoichiometric bovine bone derived hydroxyapatite, Key Engineering Materials, Vol. 638, 2014, Pag. 3-7, DOI: 10.4028/www.scientific.net/KEM.638.3, Document Type: Conference Paper, ISSN: 10139826 ISBN: 978-303835432-1, Indexat SCOPUS, 2014.
- C1.18. **F. Miculescu**, LT. Ciocan, M. Miculescu, I. Antoniac, A. Purcaru, O. Preda, A. Maidaniuc, Cooling conditions influence on cortical bovine bones derived hydroxyapatite, Key Engineering Materials , Vol. 638, 2014, Pag. 111-116, DOI: 10.4028/www.scientific.net/KEM.638.111, Document Type: Conference Paper, ISSN: 10139826 ISBN: 978-303835432-1.x, Indexat SCOPUS, 2014.
- C1.19. M. Miculescu, M. Bane, **F. Miculescu**, O. Preda, I. Plotog, Dental plating efficiency of metal base dental alloys by thermal diffusivity study, Key Engineering Materials, Vol. 638, 2014, Pag. 141-144, DOI: 10.4028/www.scientific.net/KEM.638.141, Document Type: Conference Paper, ISSN: 10139826 ISBN: 978-303835432-1, Indexat SCOPUS, 2014.
- C1.20. M. Miculescu, M. Bane, **F. Miculescu**, LT. Ciocan, O. Preda, I. Antoniac, A study on metal-ceramic interface on metal base dental alloys, Key Engineering Materials, Vol. 638, 2014, Pag. 14-19, DOI: 10.4028/www.scientific.net/ KEM.638.14, Document Type: Conference Paper, ISSN: 10139826 ISBN: 978-303835432-1, Indexat SCOPUS, 2014.
- C1.21. S.I. Voicu, A. Muhulet, M. Miculescu, **F. Miculescu**, S. Vizireanu, Polysulfone membrane reactors for derivatization of carbon nanotubes, Advanced Materials - TechConnect Briefs 2016, Volume 1, 2016, Pages 300-303, 10th Annual TechConnect World Innovation Conference and Expo, Held Jointly with the 19th Annual Nanotech Conference and Expo, and the 2016 National SBIR/STTR Conference; Washington; United States; Code 122946, ISBN: 978-099751170-3, Document Type: Conference Paper, Indexat SCOPUS, 2016.
- C1.22. **F. Miculescu**, A. Maidaniuc, S.I. Voicu, M. Miculescu, D. Batalu, Strategies for production of naturally-derived calcium phosphates particles, Advanced Materials - TechConnect Briefs 2016, Volume 3, 2016, Pages 31-34, 10th Annual TechConnect World Innovation Conference and Expo, Held Jointly with the 19th Annual Nanotech Conference and Expo, and the 2016 National SBIR/STTR Conference; Washington; United States; Code 122946, ISBN: 978-099751172-7, Document Type: Conference Paper, Indexat SCOPUS, 2016.
- C1.23. Geambazu, L.E., Manea, C.A., Csaki, I., **F. Miculescu**, Al0.5CrCoFeNi high entropy alloy for Geothermal Environment, ISSN: 17578981, IOP Conference Series: Materials Science and Engineering Volume 572, Issue 1, Article number 012073, 2019 International Conference on Innovative Research, ICIR EUROINVENT 2019; Iasi; Romania; Code 150123, DOI: 10.1088/1757-899X/572/1/012073, Indexat SCOPUS, 2019.
- C1.24. Csáki, I., Karlsdottir, S.N., Stefanoiu, R., Geambazu, L.E., **F. Miculescu**, Thorlaksson, A.I., Motoiu, A.V., Mechanically alloyed CoCrFeNiMo high entropy alloy behavior in geothermal steam, NACE - International Corrosion Conference Series, Volume 2019-March, Article number 13239, Corrosion Conference and Expo 2019; Nashville; United States; 24 March 2019 through 28 March 2019; Code 149623, ISSN: 03614409, Indexat SCOPUS, 2019.

#### **Works published over the past twenty years in journals and conference volumes with referees (not indexed) (D)**

D – Conference papers, etc.

- D1. O. Trante, D. Bunea, I.V. Antoniac, **F. Miculescu**, "Cercetări Privind Prelucrarea Plastică și Tratamentul Termic al Sârmelor din Oțel Inoxidabil Austenitic cu Destinație Medicală", Volum lucrări Conferința Națională "Tradiții și perspective în școala românească de metalurgie – TPSRM – București 1998" pag. 398-403, 1998.
- D2. I.V. Antoniac, **F. Miculescu**, M. Miculescu, Influența Tratamentelor Termice Asupra Proprietăților unui Oțel Inoxidabil Austenitic Utilizat ca Biomaterial, Volum lucrări Conferința Națională "Tradiții și perspective în școala românească de metalurgie – TPSRM 2000 – București 2000", ISBN 973-652-222-9, 2000.

- D3. D. Iăptoiu, I. Antoniac, **F. Miculescu**, M. Brânzei, D. Gheorghe, Model de Eșec în Protezele de Genunchi Tip Plat/Plat, Volum lucrări Simpozionul Național cu Participare Internațională “BIOMATERIALE – prezent și perspective” București, ISBN 973-652-808-3, 2002.
- D4. D. Bojin, **F. Miculescu**, B. Fresz, J.R. Groza, Copper Electrodes for rsw of Aluminium, p.371, Conferinta Nationala Tehnologii si Materiale Avansate, Galati, 20 - 22 Noiembrie 2003
- D5. I. Pătrașcu, B. Gălbinașu, L.T. Ciocan, A. Bojin, **F. Miculescu**, Analiza esem a Interfeței Materialelor Restaurative Odontale, Simpozionul National de Biomateriale, Galati, ISBN 973-627-067-X, 2003.
- D6. **F. Miculescu**, D. Bunea, V. Antoniac, L.T Ciocan, B. Galbinașu, Distribuția Chimică Elementară la Interfața Implantelor Metalice Osteointegrate, Simpozionul National de Biomateriale, 20-22 Noiembrie 2003, Galati, ISBN 973-627-067-X
- D7. **F. Miculescu**, D. Bunea, V. Antoniac, L.T Ciocan, M. Miculescu, Cercetări Experimentale prin Microscopie Electronică de Baleaj Privind Ostointegrarea Intramedulară a Biomaterialelor Metalice, Simpozionul National de Biomateriale, Galati, ISBN 973-627-067-X, 2003.
- D8. D. Laptoiu, I. Antoniac, **F. Miculescu**, A. Constantin, Studii si cercetari privind uzura componentei de polietilena a endoprotezelor de genunchi, Simpozionul National de Biomateriale, Galati, ISBN 973-627-067-X, 2003.
- D9. R. Cristescu, L.T. Ciocan, I. Patrascu, **F. Miculescu**, M. Miculescu, “Studiu de Microscopie Electronica Privind Adeziunea Sigilantilor Endodontici la Peretii Canalelor Radiculare”, 9th International Symposium “The Stomatological Days in Banat”, Timisoara, Timisoara Medical Journal, Vol. 54, Supp. 2, pag. 34, ISSN 1583-5251, 2003.
- D10. I. Antoniac, D. Laptoiu, M. Miculescu, V. Bunea, **F. Miculescu**, Retrieval analysis of some cementless HA-coated smooth surface acetabular implants, European Cells and Materials, Vol. 5, Iss. SUPPL. 1, Pag. 51-52, Source Type: Journal. Document Type: Conference Paper. Indexat SCOPUS. ISSN: 14732262,
- D11. D. Bunea, D. Bojin, S. Zamfir, **F. Miculescu**, M. Miculescu, Experimental researches concerning the Co-Cr-Mo alloys used in implantology, European Cells and Materials, Vol. 5, Iss. SUPPL. 1, Pag. 53-54, Source Type: Journal. Document Type: Conference Paper. Indexat SCOPUS. ISSN: 14732262, 2003.
- D12. D. Bunea, **F. Miculescu**, L.T. Ciocan, I. Patrăscu, H. Elefterescu, “A Study on Ti Implants Regarding Ostointegration Processes Development”, The Proceeding of International Conference “Biomaterials and Medical Devices – Biommedd 2004”, Bucuerști, ISBN 973-718-083-6, 2004.
- D13. L.T. Ciocan, D. Bunea, D. Bojin, I. Antoniac, **F. Miculescu**, M. Miculescu, “Mapping Type EDAX Analyze Use to Interpret Metallic Implant – Biological Environment Interaction”, The Proceeding of International Conference “Biomaterials and Medical Devices – Biommedd 2004”, Bucuerști, ISBN 973-718-083-6, 2004.
- D14. G.A. Stanciu, C. Dan, **F. Miculescu**, D. Bunea. K.M. Paraskevopoulos, P. Koidis, “Analysis of the Hydroxyapatite Formation Grown on the Bioactive Glass by Confocal Laser Scanning Laser Microscopy, Environmental Scanning Electron Microscopy and Energy Dispersive X-ray Analysis”, The Proceeding of International Conference “Biomaterials and Medical Devices – Biommedd 2004”, Bucuerști, ISBN 973-718-083-6, 2004.
- D15. I. Antoniac, D. Laptoiu, D. Bunea, M. Sajin, **F. Miculescu**, C. Lacatusu, “Retrieval Analysis of the Polyethylene Component in a Total Knee Implant”, The Proceeding of International Conference “Biomaterials and Medical Devices – Biommedd 2004”, Bucuerști, ISBN 973-718-083-6, 2004.
- D16. A. Firica, S. Malincenco, D. Laptoiu , I. Antoniac , **F. Miculescu**, “Metal on Metal Hip Resurfacing Arthroplasty–Design and Advantages”, The Proceeding of International Conference “Biomaterials and Medical Devices – Biommedd 2004”, Bucuerști, ISBN 973-718-083-6, 2004.
- D17. D. Laptoiu, **F. Miculescu**, S. Malincenco, C. Lăcătușu, A. Constantin, D. Robu, “Surface Analysis of Knee Articular Cartilage by Environmental Scanning Electron Microscopy”, The Proceeding of International Conference “Biomaterials and Medical Devices – Biommedd 2004”, Bucuerști, ISBN 973-718-083-6, 2004.
- D18. F. Purghel, D. Bunea, L. Purghel, S. Ivanescu, I. Antoniac, R. Badea, M. Nedea, A. Anastasiu, **F. Miculescu**, R. Iacobescu, “Structure of Biomaterials on the Loosening of Total Hip Prostheses”, The Proceeding of International Conference “Biomaterials and Medical Devices – Biommedd 2004”, Bucuerști, ISBN 973-718-083-6, 2004.
- D19. I. Pătrașcu, R.C. Cristescu, L.T. Ciocan, **F. Miculescu**, M. Miculescu, “ESEM Study on the Provisional Coronal Restoration of Endodontically Treated Teeth”, The Proceeding of International Conference “Biomaterials and Medical Devices – Biommedd 2004”, Bucuerști, ISBN 973-718-083-6, 2004.
- D20. R.C. Cristescu, L.T. Ciocan, **F. Miculescu**, M. Miculescu, Studiu de Microscopie Electronica Privind Sigilarea Canalelor Radiculare, Congresul National de Medicină Dentară pentru studenți și tineri medici, București, 2004.
- D21. **F. Miculescu**, D. Bojin, I.Antoniad, M. Miculescu, Studies of Metallic Biomaterials Cytotoxicity, Al V-lea Simpozion Național de Biomateriale – “Biomateriale și Aplicații Medico-Chirurgicale”, Iași, ISBN 973-627-237-0, 2005.

- D22. **F. Miculescu**, I. Antoniac, M. Miculescu, L.T.Ciocan, Influence of the Implants Surface Preparation on the Bone Ingrowth, Al V-lea Simpozion Național de Biomateriale – “Biomateriale și Aplicații Medico-Chirurgicale”, Iași, 28-29 Octombrie 2005, ISBN 973-627-237-0
- D23. M. Miculescu, M. Brânzei, D. Gheorghe, **F. Miculescu**, Experimental Researches Concerning Diffusivity Measurement Parameters Assessment on Some Alloys Used in Implantology, Al V-lea Simpozion Național de Biomateriale – “Biomateriale și Aplicații Medico-Chirurgicale”, Iași, 28-29 Octombrie 2005, ISBN 973-627-237-0;
- D24. N. Dumitru, D. Bunea, I. Patrascu, L.T. Ciocan, **F. Miculescu**, “Chemical Composition and Surface Preparation Level Influence On Metallic Implants Biointegrability”, Journées Scientifiques du CFBD, 10-11 juin 2004, Neuchâtel, l’Espace Perrier de Marin-Epanier, Suisse, vol.9, 2005.
- D25. **F. Miculescu**, D. Bunea, L.T. Ciocan, M. Miculescu, I. Antoniac, “Experimental Researches Concerning Metabolic Chemical Phenomenon at the Bone Tissue-Metallic Implant Interface”, Journées Scientifiques du CFBD, 10-11 juin 2004, Neuchâtel, l’Espace Perrier de Marin-Epanier, Suisse, Vol.9, 2005.
- D26. **F. Miculescu**, D. Bunea, M. Miculescu, D. Bojin, “In Vitro Studies Regarding Some Metallic Biomaterials Cytotoxicity”, Conferința Internațională ESB 2005, Sorrento, Italia 2005.
- D27. **F. Miculescu**, M. Miculescu, D. Bunea, G. Stanciu, “Researches Regarding Metallic Biomaterials Samples Surface Preparation”, Conferința Internațională ESB 2005, Sorrento, Italia 2005.
- D28. I.V. Antoniac, D. Laptoiu, **F. Miculescu**, A. Dumitras, The Wear Mechanism Analysis of the Polyethylene Component in Failed Total Knee Arthroplasty, 19th Conference on Biomaterials ESB 2005, Sorento, Italia, 2005.
- D29. I.V. Antoniac, D. Laptoiu, D. Gheorghe, **F. Miculescu**, P. Antoniac, The Failure of Total Knee Prosthesis: Retrieval and Biomechanical Analysis, Proceeding of the XV Conference on Biomaterials in Medicine and Veterinary Medicine, Rytro, Poland, 2005.
- D30. I.V. Antoniac, D. Laptoiu, **F. Miculescu**, D. Bunea, Wear Behaviour in Acetabular Metal-on-Metal Components – Retrieval Analysis, Proceedings of the 18<sup>th</sup> International Congress of Mechanical Engineering COBEM, Ouro Preto, Brasil, 2005.
- D31. C. Ittu, N. Constantin, **F. Miculescu**, M. Munteanu, P. Aioanei, C. Rizescu, Pulbere Oxidica Utilizata ca Material de Acoperire a Otelului Lichid în Oala de Turnare; Al IV-lea Simpozion cu participare internațională "Mecatronică, microtehnologii și materiale noi", Targoviste, 2006.
- D32. **F. Miculescu**, I. Antoniac, L.T. Ciocan, M. Miculescu, D. Bojin, N. Miculescu, Researches Regarding the Influence of the Implant Materials Topography on the Osteo-Integration Time; 20th European conference on biomaterials, Nantes, France, 2006.
- D33. I. Antoniac, D. Laptoiu, **F. Miculescu**, M. Magureanu, Analysis of a Retrieved BHR Metal on Metal Hip Prosthesis, 20th European conference on biomaterials, Nantes, France, 2006.
- D34. M. Miculescu, M. Branzei, D. Gheorghe, **F. Miculescu**, N. Miculescu, Researches Regarding Metallic Biomaterials Microstructural Characterization, 20th European conference on biomaterials, Nantes, France, 2006.
- D35. L.T. Ciocan, **F. Miculescu**, M. Miculescu, I. Patrascu, Retrieval Analysis on Ti Dental Implants Using ESEM Method; 20th European conference on biomaterials, Nantes, France, 2006.
- D36. G.A. Stanciu, I. Sandulescu, B. Savu, D. Bojin, **F. Miculescu**, X. Chatzistavrou, E. Kontonasaki, P. Koidis, K.M. Paraskevopoulos, Surface Roughness and Thickness of Hidroxypapatite Layer Grown on Bioactive Glass Investigated by Confocal Laser Scanning Microscopy and Scanning Electron Microscopy, International Conference on Biomaterials & Medical Devices "Biommedd2006".
- D37. S. Ciucă, M. Tarcolea, **F. Miculescu**, I. Gherghescu, A. Carrado, J. Werckmann, J. Fearber, G. Socol, S. Grigorescu, E. Gyorgy, I.N. Mihailescu, Microstructural Analisys of Calcium Phosphates Biocompatible Films Growth by Pulsed Laser Deposition and Sol-Gel Techniques, International Conference on Biomaterials & Medical Devices "Biommedd2006".
- D38. G. Cosmeleata, **F. Miculescu**, I. Savulescu-Fiedler, S. Stanilescu, I. Ciucă, I.I. Bruckner, The Usefulness of Electronic Microscopy for Evaluation of Vascular Endothelial Changes in Patients with Endothelial Dysfunction, International Conference on Biomaterials & Medical Devices "Biommedd2006".
- D39. I. Antoniac, D. Laptoiu, R. Marinescu, **F. Miculescu**, P. Antoniac, Experimental Research Comparision Between Mixing and Cementing Techniques Involved in the Clinical Application of Different Commercial Bone Cements, International Conference on Biomaterials & Medical Devices "Biommedd2006"
- D40. **F. Miculescu**, D. Bojin, I. Antoniac, L.T. Ciocan, N.Miculescu, Studiul Interfeței Țesut-Implant Dentar Metalic cu Ajutorul Microscopiei Electronice de Baleaj, Volumul de lucrări al Simpozionului Național de Biomateriale „Biomateriale și Aplicații Medico-Chirurgicale” ediția a VI-a, Cluj-Napoca, 2007.
- D41. M. Miculescu, G. Coșmeleată, I. Antoniac, **F. Miculescu**, M. Târcolea, Studii Privind Compatibilitatea Metalo-Ceramică din Punct de Vedere Termic în Implanturile Dentare, Volumul de lucrări al Simpozionului Național de Biomateriale „Biomateriale și Aplicații Medico-Chirurgicale” ediția a VI-a, Cluj-Napoca, 2007.

- D42. P. Antoniac, M. Sajin, A. Chefani, **F. Miculescu**, G. Pariza, M. Ciurea, Studii Experimentale Privind Biofuncționalitatea Structurilor Biodegradabile Utilizate la Execuția Plaselor herniare, Volumul de lucrări al Simpozionului Național de Biomateriale „Biomateriale și Aplicații Medico-Chirurgicale” ediția a VI-a, Cluj-Napoca, 2007.
- D43. E. Albert, M. Muntean, A. Ianculescu, **F. Miculescu**, B. Albert, E. Fazakas, Microstructure and Properties Correlation in a Basaltic Andesite Ceramic Composite; 8<sup>th</sup> International Balcan Workshop on Applied Physics, Constanța, Romania, 2007.
- D44. M. Brânzei, M. Miculescu, D. Gheorghe, **F. Miculescu**, A Proposal for Initial Material Characterization of Gauge Blocks Dimensional Stability in Time, the International Thermal Conductivity Conference (ITCC) and the International Thermal Expansion Symposium (ITES), Birmingham, Alabama, USA, 2007.
- D45. D. Gheorghe, A. Bantas, M. Brânzei, M. Miculescu, **F. Miculescu**, Characterization of Some High Dispersed and Conductive Metallic Powders for Integrated in Polymeric Coatings, the International Thermal Conductivity Conference (ITCC) and the International Thermal Expansion Symposium (ITES), Birmingham, Alabama, USA, 2007.
- D46. P. Antoniac, A. Ivanov, I. Antoniac, **F. Miculescu**, G. Cosmeleata, Experimental researches about technological and microstructural aspects in the case of cobalt-chromium dental alloys, European Cells and Materials, Vol. 13, Iss. SUPPL.3, Page 28, Source Type: Journal. Document Type: Conference Paper. Indexat SCOPUS. ISSN: 14732262, 2007.
- D47. I. Antoniac, M. Sajin, **F. Miculescu**, P. Antoniac, M. Ciurea, Adhesion formation in response to some biodegradable structures used in mesh repair of abdominal wall hernia, European Cells and Materials, Vol. 13, Iss. SUPPL.3, Page 31, Source Type: Journal. Document Type: Conference Paper. Indexat SCOPUS. ISSN: 14732262, 2007.
- D48. C.A. Comes, M.C. Rusu, A.M. Jianu, L. Podoleanu, R. Cergan, **F. Miculescu**, M. Miculescu, Structural Analyses of the Human Temporomandibular Joint Disk, Interdisciplinary Approach to present dental medicine – International Congress, Timișoara, ISSN 1844-4903, 2008.
- D49. M. Branzei, M. Calin, M. Miculescu, **F. Miculescu**, A New  $\beta$ -Ti Based Alloys Class with Copious RT Deformability for Medical Devices, Conferința Internațională Biommedd 2008, București, 2008.
- D50. R. Piticescu, G. Negroiu, I. Mihailescu, I. Patrascu, **F. Miculescu**, L.M. Popescu, Integrated of Soft Chemical Methods in the Development of Hybrid Biomaterials for Dental Implants, Conferința Internațională Biommedd 2008, București, 2008.
- D51. E. Albert, M. Muntean, A. Ianculescu, **F. Miculescu**, B. Albert, E., Schimbări Structurale în Compoziții Ceramice pe Bază de Andezit Bazaltoid, a X-a Conferința CONSILOX, Timișoara, 2008.
- D52. I. Antoniac, D. Laptoiu, **F. Miculescu**, R. Istrate, C. Trisca-Rusu, Microscopy analysis of total knee prosthesis failure caused by polyethylene wear, European Cells and Materials, Volume 16, Issue SUPPL. 1, Page 18, Document Type: Conference Paper, Indexat SCOPUS, 2008.
- D53. M. Târcolea, A.E. Dumitru, A.M. Sandu, **F. Miculescu**, C.M. Cotrut, N. Miculescu, Investigations on Precipitation Phenomena in a SMA (Ni-Ti), European Cells and Materials, Volume 16, Issue SUPPL. 1, 2008, Page 57, ISSN: 14732262, Document Type: Conference Paper, Indexat SCOPUS, 2008.
- D54. T. Zecheru, C. Zaharia, E. Rusen, **F. Miculescu**, C. Cincu, Synthesis, characterisation and bioavailability of two new terpolymer systems, 8th World Biomaterials Congress 2008, WBC 2008; Amsterdam; Netherlands; Volume 3, 2008, Page 1490, Code 93751, ISBN: 978-161567080-2, Document Type: Conference Paper, Indexat SCOPUS, 2008.
- D55. M.C. Rusu, C.A. Comes, D. Stanciu, L. Podoleanu, A.M. Jianu, **F. Miculescu**, M. Miculescu, Structural analyses of the human temporomandibular joint disk: The chondrocytes, European Cells and Materials, Vol. 16, Iss. SUPPL. 5, Page 23, Source Type: Journal. Document Type: Conference Paper. Indexat SCOPUS. ISSN: 14732262, 2008.
- D56. S. Ciucă, G. Cosmeleata, R. Borsa, M. Tarcolea, **F. Miculescu**, B. Ghiban, A. Carrado, E. Gyorgy, I.N. Mihailescu, Bioceramic coatings obtained by physical and chemical techniques, European Cells and Materials, Vol. 16, Iss. SUPPL. 1, Page 28, Source Type: Journal. Document Type: Conference Paper. Indexat SCOPUS. ISSN: 14732262, 2008.
- D57. M. Tarcolea, **F. Miculescu**, S. Ciucă, R.M. Piticescu, I. Patrascu, L.T. Ciocan, ESEM investigation on osseointegration of Ti alloy implants, European Cells and Materials, Vol. 16, Issue SUPPL. 1, Page 56, Source Type: Journal. Document Type: Conference Paper. Indexat SCOPUS. ISSN: 14732262, 2008.
- D58. D. Gheorghe, M. Branzei, M. Miculescu, **F. Miculescu**, M. Calin, Quantitative Characterization of a New Class of  $\beta$ -Ti Based Alloy, Conferința Internațională Biommedd 2008, București, 2008.
- D59. A. Ivanov, I. Antoniac, C. Cotrut, **F. Miculescu**, D. Laptoiu, R. Istrate, Failure Analysis of Different Retrieved Hip Prostheses, Conferința Internațională Biommedd 2008, București, 2008.
- D60. **F. Miculescu**, T. Zecheru, M. Tarcolea, M. Miculescu, Dimensional and Morphological Analysis of P(HEMA-CO-DDMA-CO-AA) Microbeads, Conferința Internațională Biommedd 2008, București, 2008.

- D61. M.Miculescu, M. Branzei, **F. Miculescu**, Maraging Steel - a Potential Material for Suture Needles and Surgical Blades, Conferința Internațională Biommedd 2008, București, 2008.
- D62. I.Sandru, S. Peretz, **F. Miculescu**, M. Miculescu, F.D. Tichelaar, L.O Cintea, Optical Properties of Water Dispersible ZnS Nanoparticles Obtained in Polymeric and Microemulsion Templates, Conferința Internațională Biommedd 2008, București, 2008.
- D63. I.Sebe, I.Antoniad, D.Laptoiu, **F. Miculescu**, M.Tarcolea, C.Cotrut, R.Istrate, FTIR and Microscopy Analysis of Different UHMWPE Used in Arthroplasty, Conferința Internațională Biommedd 2008, București, 2008.
- D64. I.Titorencu, M.G. Albu, V. Trandafir, I. Antoniac, V. Marinescu, V. Jinga, C. Cotrut, **F. Miculescu**, M. Simionescu, Proliferation of Endothelial Cells on Collagen/Doxycycline Matrices, Conferința Internațională Biommedd 2008, București, 2008.
- D65. T. Zecheru, C. Zaharia, E. Rusen, **F. Miculescu**, I. Sebe, I. Antoniac, C. Cincu, Synthesis and Characterisation of MMA-Tipa Copolymers for Tumour Detection, Conferința Internațională Biommedd 2008, București, 2008.
- D66. P. Antoniac, M. Sajin, **F. Miculescu**, C. Cotrut, C. Vodislav, I. Antoniac, M. Ciurea, Biodegradability Evaluation Methods for Some Biodegradable Structures Used in Mesh Repair of Abdominal Wall Hernia, Conferința Internațională Biommedd 2008, București, 2008.
- D67. **F. Miculescu**, M. Miculescu, D. Bojin, Pastes and Lead-Free Alloys Microstructural Characterization Before and After Soldering Process by Scanning Electron Microscopy/EDX Analysis, COST action MP0602, HISOLD, Bochum, 2009.
- D68. **F. Miculescu**, L.T. Ciocan, M. Miculescu, I. Pencea, Aspects concerning the heavy metal metabolism in the human hard tissues, Biommedd2010, Sinaia, Romania, 2010.
- D69. **F. Miculescu**, I. Jepu, C. Lungu, M. Miculescu, I. Antoniac, Measured and estimated influence of the electron beam in analysis of nanolayers, Biommedd2010, Sinaia, Romania, 2010.
- D70. **F. Miculescu**, I. Pencea, M. Miculescu, I. Antoniac, Estimated limits in XRF analysis for measuring heavy metals in human hard tissues, Biommedd2010, Sinaia, Romania, 2010.
- D71. **F. Miculescu**, I.Jepu, C.Porosnicu, C.Lungu, D.Bojin, TVA obtained CuNiCuFe nanolayers for medical sensors, Biommedd2010, Sinaia, Romania, 2010.
- D72. **F. Miculescu**, C.Lungu, V.Kuncser, N. Miculescu, I. Antoniac, M. Miculescu, Nanolayers Based on Giant Magnetoresistance Effect With Multiple Applications, NN10 Greece, 2010.
- D73. A.Robu, D.Laptoiu, R.Marinescu, **F. Miculescu**, I.Antoniad, D.Trante, I.Stancu, Biocomposites for biodegradable implants – synthesis and characterisation, NN10 Greece, 2010.
- D74. **F. Miculescu**, I. Jepu, C.P. Lungu, M. Branzei, I. Antoniac, Nanolayers with medical applications, Conferinta Internationala Euro Biomat – European Simposium on Biomaterials and Releated Areas, Jena, Germania, 2011.
- D75. A. Antoniac, A.I. Blajan, R. Istrate, M. Istodorescu, **F. Miculescu**, A. Antoniac, Correlation between technological aspects and morpho-structural characteristics in the case of bioresorbable composites for orthopaedic screws, 1st International Seminar on Biomaterials & Regenerative Medicine, Gura Humorului, Romania, 2011.
- D76. M. Miculescu, A. Ernuteanu, **F. Miculescu**, L.T. Ciocan, Thermal analysis of human hard tissues, 1st International Seminar on Biomaterials & Regenerative Medicine, Gura Humorului, Romania, 2011.
- D77. I.V. Antoniac, M. Albu, **F. Miculescu**, A. Antoniac, C. Cotrut, The advantage of collagen coating for different biodegradable materials used in regeneration of the abdominal tissue, Tissue Engineering & Regenerative Medicine International Society, Granada, Spain, 2011.
- D78. **F. Miculescu**, I. Jepu, C. Posornicu, C.P. Lungu, M. Miculescu, M. Stancu, D. Bojin, The influence of the electron beam on nanolayers analysis, Tissue Engineering & Regenerative Medicine International Society, Granada, Spain, 2011.
- D79. A.I. Blajan, A. Antoniac, **F. Miculescu**, I. Antoniac, The influence of the ceramic phase on the structure of different resorbable biomaterials based on poly-L-lactic acid (PLLA) for orthopaedic screws, 8th International Conference on Nanosciences & Nanotechnologies (NN11) Thessaloniki, Greece, 2011.
- D80. M. Tarcolea, **F. Miculescu**, C. Cotrut, V. Soare, Anticorrosive protection with phosphate Ni-Zn thin films – composition, growing morphology and corrosion resistance, Advanced Materials and Structures - AMS '11, Timisoara, Romania, ISBN: 978-606-554-374-4, 2011.
- D81. I. Plotog, M. Branzei, A. Thumm, **F. Miculescu**, Structural characterization of micro alloyed SN100c solder materials system in VPS assembling process, Advanced Materials and Structures - AMS '11, Timisoara, Romania, ISBN: 978-606-554-374-4, 2011.
- D82. B. Ghiban, C.M. Bortun, N. Ghiban, N. Faur, G. Jiga, **F. Miculescu**, A. Semenescu, A. Cernescu, Failure Analysis of Some Heat Curing Resins for Dental Applications, IQCMEA – Proceeding, Performance and Failure Analysis of Engineering Materials, Luxor, Egypt, 2011.
- D83. **F. Miculescu**, I. Jepu, C.P. Lungu, M. Miculescu, I.V. Antoniac, D. Bojin, Comparative simulated and

- experimental study on Cu Ni Fe nanolayers, 24th European Conference on Biomaterials, Dublin, Ireland, 2011.
- D84. **F. Miculescu**, I. Jepu, C.P. Lungu, M. Miculescu, I. Antoniac, D. Bojin, Comparative simulated and experimental study on Cu Ni Fe nanolayers, 24th European Conference on Biomaterials, EBS 2011; Dublin; Ireland; Page 1, Code 100603, Document Type: Conference Paper, Indexat SCOPUS, 2011.
- D85. M. Miculescu, I. Pencea, **F. Miculescu**, L.T. Ciocan, A. Ernuteanu, E. Matei, EDXRF analysis of heavy elements in human hard tissue, 24th European Conference on Biomaterials, EBS 2011; Dublin; Ireland; 1 page; Code 100603, Document Type: Conference Paper, Indexat SCOPUS, 2011.
- D86. A Ghiban, B. Ghiban, C.M. Bortun, N. Ghiban, A. Semenescu, **F. Miculescu**, P. Moldovan, Tensile and bending behavior for some CoCrMo alloys, 24th European Conference on Biomaterials, EBS 2011; Dublin; Ireland; 1 page, Code 100603, Document Type: Conference Paper, Indexat SCOPUS, 2011.
- D87. L.T. Ciocan, **F. Miculescu**, M. Miculescu, I. Pătrașcu, Advantages and Failures in Zirconia Restorations, Proceeding of International Conference Biommedd2012, Constanța, Romania, ISSN: 2069-0193, ISBN: 9-772069019002.
- D88. B.M. Galbinas, D. Herschbach, **F. Miculescu**, L.T. Ciocan, I. Patrascu, Static and Dynamic Evaluation of Inlay - Dental Tissue Interface, Proceeding of International Conference Biommedd2012, Constanța, Romania, ISSN: 2069-0193, ISBN: 9-772069019002.
- D89. R.M. Comăneanu, D.L. Ghergic, E. David, **F. Miculescu**, M.C. Cotrut, M. Târcolea, SEM Study About Dental Implants Failure, Proceeding of International Conference Biommedd2012, Constanța, Romania, ISSN: 2069-0193, ISBN: 9-772069019002.
- D90. C.M. Cotrut, A. Vladescu, V. Braic, M. Braic, I. Titorencu, A. Kiss, **F. Miculescu**, C.N. Zoita, Characterization of Nanostructured Hf Doped Zirconium Carbonitride Films, Proceeding of International Conference Biommedd2012, Constanța, Romania, ISSN: 2069-0193, ISBN: 9-772069019002.
- D91. B. Ghiban, F. Purghel, N. Ghiban, I.V. Antoniac, A. Semenescu, S. Ciucă, **F. Miculescu**, Investigations of Different Fracture Surfaces From Stainless Steels Implants, Proceeding of International Conference Biommedd2012, Constanța, Romania, ISSN: 2069-0193, ISBN: 9-772069019002.
- D92. **F. Miculescu**, I. Jepu, C. Porosnicu, C. Lungu, D. Bojin, TVA Obtained CuNiCuFe Nanolayers for Medical Sensors, Proceeding of International Conference Biommedd2012, Constanța, Romania, ISSN: 2069-0193, ISBN: 9-772069019002.
- D93. **F. Miculescu**, I. Jepu, C. Lungu, M. Miculescu, I. Antoniac, Measured and Estimated Influence of The Electron Beam in Analysis of Nanolayers, Proceeding of International Conference Biommedd2012, Constanța, Romania, ISSN: 2069-0193, ISBN: 9-772069019002.
- D94. **F. Miculescu**, L.T. Ciocan, M. Miculescu, I. Pencea, Aspects Concerning the Heavy Metal Metabolism in the Human Hard Tissues, Proceeding of International Conference Biommedd2012, Constanța, Romania, ISSN: 2069-0193, ISBN: 9-772069019002.
- D95. **F. Miculescu**, I. Pencea, M. Miculescu, I. Antoniac, Estimated Limits in XRF Analysis for Measuring Heavy Metals in Human Hard Tissues, Proceeding of International Conference Biommedd2012, Constanța, Romania, ISSN: 2069-0193, ISBN: 9-772069019002.
- D96. A. Robu, C.M. Cotrut, **F. Miculescu**, Surface and Morphology of Zr Based Biocompatible Thin Films Deposited on Metallic Substrate, Proceeding of International Conference Biommedd2012, Constanța, Romania, ISSN: 2069-0193, ISBN: 9-772069019002.
- D97. M. Târcolea, A. Bechir, R.M. Comăneanu, **F. Miculescu**, O. Smătrea, D.L. Ghergic, Microscopic Studies Regarding the Causes of the Fracture in an Aesthetic Dental Bridge, Proceeding of International Conference Biommedd2012, Constanța, Romania, ISSN: 2069-0193, ISBN: 9-772069019002.
- D98. I. Antoniac, D. Vranceanu, **F. Miculescu**, Bioceramics Influence on the Biodegradability of Collagen Based Composite for Hard Tissue Regeneration, 6th International Symposium Apatite and Correlative Biomaterials, Bioceramics Development and Applications, Proceedings-ISACB-6, ISSN: 2090-5025 BDA, June 6-7, 2013, Nantes, France.
- D99. **F. Miculescu**, L.T. Ciocan, M. Miculescu, M. Branzei, N. Ghiban, Thermal processing temperature influence on hard tissue chemical composition, International Conference on Materials Science and Engineering, BRAMAT, 28 February -2 March, 2013, Brașov, România.
- D100. M. Miculescu, M. Brânzei, **F. Miculescu**, M. Bane, A study on metal-ceramic thermal expansion compatibility, Fifth International Conference on Advanced Materials and Structures, ISSN: 2248-0781, 24-25 October, Timișoara, România, 2013.
- D101. **F. Miculescu**, L.T. Ciocan, M. Miculescu, M. Bane, M. Brânzei, Implant surface finishing influence on tissue-implant anchoring, Fifth International Conference on Advanced Materials and Structures, ISSN: 2248-0781, 24-25 October, Timișoara, România, 2013.
- D102. I. Antoniac, A. Robu, **F. Miculescu**, D. Gheorghe, The influence of processing technologies of dental alloys on the microstructure and surface of metallic structure in the case of metalo-ceramic prostheses, Fifth

International Conference on Advanced Materials and Structures, ISSN: 2248-0781, 24-25 October, Timișoara, România, 2013.

- D103.R. M. Comăneanu, C. Coman, H. M. Barbu, **F. Miculescu**, M. Târcolea, Correlation between cito-histopathological changes of tissue at the interface with dental implants and level of processing implant surface, Proceeding of International Seminar on Biomaterials & Regenerative Medicine BioReMed'2013 și Simpozionul Național de Biomateriale "Biomateriale și Aplicații Medico - Chirurgicale" IXth edition, ISBN: 978-973-670-520-5, 30 Mai - 2 Iunie 2013, Iași, România.
- D104.M. Miculescu, L.T.Ciocan, **F. Miculescu**, I. Antoniac, A. Ernuțeanu, research for LOD determination of heavy metals measurands and accompanying elements and reletad LODD determining, Proceeding of International Seminar on Biomaterials & Regenerative Medicine BioReMed'2013 și Simpozionul Național de Biomateriale "Biomateriale și Aplicații Medico - Chirurgicale" IXth edition, ISBN: 978-973-670-520-5, 30 Mai - 2 Iunie 2013, Iași, România.
- D105.**F. Miculescu**, L.T.Ciocan, M. Miculescu, I. Antoniac, A. Ernuțeanu, Surface modification with PLA - an alternative in biomaterials based on heat treated compact bone, Proceeding of International Seminar on Biomaterials & Regenerative Medicine BioReMed'2013 și Simpozionul Național de Biomateriale "Biomateriale și Aplicații Medico - Chirurgicale" IXth edition, ISBN: 978-973-670-520-5, 30 Mai - 2 Iunie 2013, Iași, România.
- D106.D. Vrânceanu, A. Antoniac, C. Vodislav, **F. Miculescu**, I. Antoniac, Biodegradability studies of some composites collagen-bioceramics, Proceeding of International Seminar on Biomaterials & Regenerative Medicine BioReMed'2013 și Simpozionul Național de Biomateriale "Biomateriale și Aplicații Medico - Chirurgicale" IXth edition, 30 Mai - 2 Iunie 2013, Iași, România.
- D107.A. Visan, D. Grossin, N. Ștefan, L. Duță, F.M. Miroiu, M. Sopronyi, **F. Miculescu**, M. Freche, C. Charvilat, O. Marsan, S. Ciucă. I.N. Mihăilescu, Biomimetic nanocrystalline apatite coatings synthesized by matrix assisted pulsed laser evaporation for medical applications, 25th Symposium and Annual Meeting of the International Society for Ceramics in Medicine, ISBN: 978-606-23-0104-0, 7-10th November, 2013, Bucharest, Romania.
- D108.R. Ionescu, C. Munteanu, **F. Miculescu**, E. Vasile, M. Niculescu, R. Șaban, Surface characterisation and adhesion studies on some ceramic coatings on stainless steel substrate, 25th Symposium and Annual Meeting of the International Society for Ceramics in Medicine, ISBN: 978-606-23-0104-0, 7-10th November, 2013, Bucharest, Romania.
- D109.M. Miculescu, L.T. Ciocan, **F. Miculescu**, I. Antoniac, Thermophysical study of PFM systems for dental applications, 25th Symposium and Annual Meeting of the International Society for Ceramics in Medicine, ISBN: 978-606-23-0104-0, 7-10th November, 2013, Bucharest, Romania.
- D110.M. Niculescu, M. Negrușoiu, **F. Miculescu**, Retrieval analysis of some total knee prosthesis and considerations about the influence of cementing technique for the tibial component on the degradation rate, 25th Symposium and Annual Meeting of the International Society for Ceramics in Medicine, ISBN: 978-606-23-0104-0, 7-10th November, 2013, Bucharest, Romania.
- D111.M. Branzei, M. Miculescu, **F. Miculescu**, Complex characterization of three types of titanium alloys, Conferința Internațională Biommedd2014, Constanța, România.
- D112.**F. Miculescu**, A. Berbecaru, M. Miculescu, I.V. Antoniac, A. Purcaru, A. Maidaniuc, Cooling conditions influences on cortical bovine bones derived hydroxyapatite, Conferința Internațională Biommedd2014, Constanța, România.
- D113.**F. Miculescu**, L.T. Ciocan, M. Miculescu, A. Mocanu, A. Maidaniuc, A. Purcaru Micro-analytical comparison regarding elemental composition of nonstoichiometric bovine bone derived hydroxyapatite, Conferința Internațională Biommedd2014, Constanța, România.
- D114.M. Miculescu, M. Bane, **F. Miculescu**, L.T. Ciocan, D. Enescu, I.V. Antoniac, A study on metal ceramic interface on metal base dental alloys, Conferința Internațională Biommedd2014, Constanța, România.
- D115.M. Miculescu, M. Bane, **F. Miculescu**, D. Meghea, Dental plating efficiency of metal base dental alloys by thermal diffusivity study, Conferința Internațională Biommedd2014, Constanța, România.
- D116.M. Niculescu, D. Laptoiu, D. Cojocaru, **F. Miculescu**, I.V. Antoniac, Effects of stem preheating on the stem-cement interface for cemented hip implants: in vitro study, Conferința Internațională Biommedd2014, Constanța, România.
- D117.A. Robu, L. Reclaru, C.M. Cotrut, **F. Miculescu**, A. Antoniac, Microstructural characterization of different Co-Cr dental alloys obtained using different processing routes, Conferința Internațională Biommedd2014, Constanța, România.
- D118.A.T. Farcasiu, I. Antoniac, **F. Miculescu**, C. Farcasiu, SEM evaluation of different denture base materials used in clinical practice, International Seminar on Biomaterials & Regenerative Medicine BIOREMED 2015, September 17-20, 2015, Oradea, Romania.
- D119.A. Antoniac, M. Niculescu, M. Albu, **F. Miculescu**, C. Tecu, I. Antoniac, Characterization of some Biomimetic

- Supports based on Biopolymers and Calcium Phosphates Potentially used for Bone Regeneration, 5th International Conference on e-Health and Bioengineering, EHB 2015, 19-21 November 2015, Iasi, Romania.
- D120. **F. Miculescu**, A. Maidaniuc, L.T. Ciocan, M. Miculescu, E. Matei, A. Mocanu, A. Berbecaru, Particle size influence in compositional analysis of bovine bone-derived products, International Seminar on Biomaterials & Regenerative Medicine BIOREMED 2015, September 17-20, 2015, Oradea, Romania.
- D121. A. Maidaniuc, G.E. Stan, M. Miculescu, S.I. Voicu, A. Cimpean, V. Mitran, D. Batalu, **F. Miculescu**, In vitro evaluation of calcium phosphate powders intended for solid freeform fabrication of bone scaffolds, 7th International Conference "Biomaterials, Tissue Engineering & Medical Devices" BIOMMEDD'2016, 15-18 September, Constanța, Romania.
- D122. A.C. Mocanu, S.I. Voicu, A. Maidaniuc, M. Miculescu, L.T. Ciocan, C.A. Dascalu, A. Berbecaru, **F. Miculescu**, Synthesis technology and preliminary characterization of marble type precursors-derived hydroxyapatite as bone substituent, 7th International Conference "Biomaterials, Tissue Engineering & Medical Devices" BIOMMEDD'2016, 15-18 September, Constanța, Romania.
- D123. A. Muhulet, **F. Miculescu**, S.I. Voicu, Composite polymeric membranes with carbon nanotubes for hemodialysis, 7th International Conference "Biomaterials, Tissue Engineering & Medical Devices" BIOMMEDD'2016, 15-18 September, Constanța, Romania.
- D124. A. Maidaniuc, G.E. Stan, M. Miculescu, S.I. Voicu, A. Cimpean, V. Mitran, D. Batalu, **F. Miculescu**, Evaluation of heat treatment parameters effects upon the material characteristics of bovine bone-derived calcium phosphates, 6th International Conference on Materials Science and Technologies – RoMat 2016, București, Romania.
- D125. A.C. Mocanu, S.I. Voicu, A. Maidaniuc, M. Miculescu, L.T. Ciocan, C.A. Dascălu, A. Berbecaru, **F. Miculescu**, Conversion procedure and preliminary characterization of *Mytilus galloprovincialis* seashell-derived ceramics as bone substitute, 6th International Conference on Materials Science and Technologies – RoMat 2016, București, Romania.
- D126. A. Purcaru, C. Pop, M. Miculescu, C.P. Lungu, I. Jepu, **F. Miculescu**, Surface morphology dependence on layer thickness in nanostructured multilayers with GMR effect, 6th International Conference on Materials Science and Technologies – RoMat 2016, București, Romania.
- D127. S.I. Voicu, A. Muhulet, M. Miculescu, **F. Miculescu**, S. Vizireanu, Polysulfone membrane reactors for derivatization of carbon nanotubes, Advanced Materials - TechConnect Briefs, Washington, USA, 2016.
- D128. **F. Miculescu**, A. Maidaniuc, S.I. Voicu, M. Miculescu, D. Batalu, Strategies for production of naturally-derived calcium phosphates particles, Advanced Materials - TechConnect Briefs, Washington, USA, 2016.
- D129. A. Maidaniuc, S.I. Voicu, M. Miculescu, C. Andronescu, E. Matei, A.C. Mocanu, I. Pencea, I. Csaki, T. Machedon-Pisu, **F. Miculescu**, Induced wettability and surface-volume correlation of composition for bovine bone derived hydroxyapatite particles, Bramat 2017 - 10th International Conference on Materials Science & Engineering, 8 - 11 martie 2017, Brașov, România (Autor principal).
- D130. **F. Miculescu**, A.C. Mocanu, G. Stan, S.I. Voicu, M. Miculescu, A. Maidaniuc, A. Cimpean, V. Mitran, T. Machedon-Pisu, Influence of the modulated two-step synthesis of biogenic hydroxyapatite on biomimetic products' surface, Bramat 2017 - 10th International Conference on Materials Science & Engineering, 8 - 11 martie 2017, Brașov, România.
- D131. S.I. Voicu, M.A. Pandele, A. Iordache, **F. Miculescu**, A.I. Staras, P. Neacsu, A. Cimpean, V.K. Thakur, Resveratrol covalent immobilization onto cellulose acetate membranes for improved osseointegration, Bramat 2017 - 10th International Conference on Materials Science & Engineering, 8 - 11 martie 2017, Brașov, România.
- D132. **F. Miculescu**, B. Vasile, C.M. Cotrut, A. Purcaru, M. Miculescu, G.E. Stan, V. Kuncser, I. Jepu, C.P. Lungu, T. Machedon-Pisu, Modulation of TVA deposition parameters for the Fe-Ni-Cu-Ta thin films interdiffusivity and GMR effect influence, Bramat 2017 - 10th International Conference on Materials Science & Engineering, 8 - 11 martie 2017, Brașov, România.
- D133. A. Maidaniuc, M. Miculescu, S.I. Voicu, R.C. Ciocoiu, A.C. Mocanu, **F. Miculescu**, Hydroxyapatite and silver microcomposites with improved mechanical characteristics, RoPM-AM 2017 - 5th International Conference on Powder Metallurgy & Advanced Materials, 17-20 septembrie 2017, Cluj-Napoca, România.
- D134. M. Miculescu, **F. Miculescu**, A. Maidaniuc, S.I. Voicu, G.E. Stan, Correlation of the Morphology, Composition and Structure of Bovine Bone-Derived Calcium Phosphates with the Sintering Parameters, 4-8 septembrie 2017, ESB 2017 - 28th Annual Conference of the European Society for Biomaterials, Atena, Grecia.
- D135. **F. Miculescu**, A.C. Mocanu, S.I. Voicu, G.E. Stan, M. Miculescu, Two-Step Wet Chemical Synthesis of Calcium Phosphates from Mediterranean Mussel Shells and White Dolomitic Marble, 4-8 septembrie 2017, ESB 2017 - 28th Annual Conference of the European Society for Biomaterials, Atena, Grecia.
- D136. **F. Miculescu**, Sustainable use of biogenic resources for developing calcium phosphates bioceramics and microcomposites with tunable bulk and surface characteristics, BIOREMED 2017 - The International

Seminar on Biomaterials and Regenerative Medicine BIOREMED 2017, 5-8 octombrie 2017, Timisoara, România.

- D137.A.C. Mocanu, A.Maidaniuc, C.A. Dascălu, M. Miculescu, **F. Miculescu**, Study on experimental and image analysis complementarity as additional tool for characterizing biogenic calcium phosphates morphology, BIOREMED 2017 - The International Seminar on Biomaterials and Regenerative Medicine BIOREMED 2017, 5-8 octombrie 2017, Timisoara, România.
- D138.A. Maidaniuc, A.C. Mocanu, C.A. Dascălu, M. Miculescu, S.I. Voicu, **F. Miculescu**, Effect of sintering time on the particle interconnection of bovine bone-derived hydroxyapatite powders, BIOREMED 2017 - The International Seminar on Biomaterials and Regenerative Medicine BIOREMED 2017, 5-8 octombrie 2017, Timisoara, România.
- D139.C. Luță, M.Soare, A.C. Mocanu, A. Maidaniuc, A. Ernuțeanu, **F. Miculescu**, Comprehensive nondestructive testing on metallic implants destined for orthopedic applications, BIOREMED 2017 - The International Seminar on Biomaterials and Regenerative Medicine BIOREMED 2017, 5-8 octombrie 2017, Timisoara, România.
- D140.A.F. Dobre, M. Soare, A.C. Mocanu, A. Maidaniuc, A. Ernuțeanu, **F. Miculescu**, Study on morphological and geometrical features of metallic implants designed for dental restorations, BIOREMED 2017 - The International Seminar on Biomaterials and Regenerative Medicine BIOREMED 2017, 5-8 octombrie 2017, Timisoara, România.
- D141.AC Mocanu, A. Maidaniuc, CA Dascălu, T. Butte, M. Miculescu, SI Voicu, **F. Miculescu**, Progressive conversion of marine and terrestrial bioresources into biomimetic calcium phosphates, Scientific Conference of Doctoral Schools SCDS-UDJG, Perspectives and challenges in doctoral research, 6th Edition, "Dunarea de Jos" University of Galati, 7-8 of June 2018.
- D142.C.A. Dascălu, A.C. Mocanu, A. Maidaniuc, T. Butte, M. Miculescu, S.I. Voicu, **F. Miculescu**, Composite Membranes Modified With Bovine Bone Bioceramics For Biomedical Applications, Scientific Conference of Doctoral Schools SCDS-UDJG, Perspectives and challenges in doctoral research, 6th Edition, "Dunarea de Jos" University of Galati, 7-8 of June 2018.
- D143.A. Maidaniuc, A.C. Mocanu, C.A. Dascalu, T. Butte, M. Miculescu, **F. Miculescu**, Research and studies regarding tridimensional structures based on powdered hydroxyapatite-based materials for bone reconstruction, Scientific Conference of Doctoral Schools SCDS-UDJG, Perspectives and challenges in doctoral research, 6th Edition, "Dunarea de Jos" University of Galati, 7-8 of June 2018.
- D144.A.C. Mocanu, I.V. Antoniac, A. Maidaniuc, M. Miculescu, C.A. Dascălu, G.E. Stan, **F. Miculescu**, Influence of synthesis set-up on seashell derived-calcium phosphates composition and complementary morphological image processing, Biommedd 2018, 27-29th September 2018, Cluj-Napoca, Romania.
- D145.C.A. Dascălu, A.C. Mocanu, A. Maidaniuc, A.M. Pandele, S.I. Voicu, **F. Miculescu**, The importance of hydroxyapatite route synthesis from bovine bone origin on composite materials used in guided bone regeneration, Biommedd 2018, 27-29th September 2018, Cluj-Napoca, Romania.
- D146.L.M. Boldu, T.M. Butte, A. Maidaniuc, R.C. Ciocoiu, G.E. Stan, A.C. Mocanu, **F. Miculescu**, Effect of calcination temperature on the morphology and composition of fish derived-calcium phosphates, Biommedd 2018, 27-29th September 2018, Cluj-Napoca, Romania.
- D147.T.M. Butte, S. Nitu, A. Maidaniuc, R.C. Ciocoiu, M. Miculescu, G.E. Stan, **F. Miculescu**, The influence of silver content on the morphological, compositional and mechanical characteristics of sintered hydroxyapatite-silver microcomposites, Biommedd 2018, 27-29th September 2018, Cluj-Napoca, Romania.
- D148.AE. Constantinescu, T.M. Butte, A. Maidaniuc, A.M. Pandele, S.I. Voicu, **F. Miculescu**, Preliminary studies on the morphology, composition and thermal behaviour of hydroxyapatite-polymer composite filaments, Biommedd 2018, 27-29th September 2018, Cluj-Napoca, Romania.
- D149.O.E. Ilie, I.V. Antoniac, T.M. Butte, A. Maidaniuc, R.C. Ciocoiu, **F. Miculescu**, Finite element analysis and experimental testing of mechanical properties of 3D printed materials for internal fixators, Biommedd 2018, 27-29th September 2018, Cluj-Napoca, Romania.
- D150.A.C. Mocanu, I.V. Antoniac, M. Miculescu, A. Maidaniuc, C.A. Dascălu G.E. Stan, **F. Miculescu**, Study on conversion methodology for dolomitic marble derived-calcium phosphates and complementary image processing, ROMAT 2018, 15-18th November 2018, Bucharest, Romania.
- D151.M. Soare, A.C. Mocanu, C. Iordache, A. Maidaniuc, **F. Miculescu**, Complementary broadband ultrasonic spectroscopy evaluation of naturally derived-calcium phosphates, ROMAT 2018, 15-18th November 2018, Bucharest, Romania.
- D152.C.A. Dascălu, A.C. Mocanu, A. Maidaniuc, G.E. Stan, A.M. Pandele, S.I. Voicu, **F. Miculescu**, The influence of hydroxyapatite addition on the structure of composite materials used in guided bone regeneration, ROMAT 2018, 15-18th November 2018, Bucharest, Romania.
- D153.L.M. Boldu, T.M. Butte, A. Maidaniuc, R.C. Ciocoiu, G.E. Stan, A.C. Mocanu, **F. Miculescu**, Influence of calcination temperature on the sinterability of fish derived-calcium phosphates, ROMAT 2018, 15-18th

November 2018, Bucharest, Romania.

- D154.T.M. Butte, S. Nitu, A. Maidaniuc, R.C. Ciocoiu, M. Miculescu, G.E. Stan, **F. Miculescu**, The effect of different sintering strategies on the characteristics of hydroxyapatite-silver microcomposites, ROMAT 2018, 15-18th November 2018, Bucharest, Romania.
- D155.E. Constantinescu, T.M. Butte, A. Maidaniuc, A.M. Pandele, S.I. Voicu, **F. Miculescu**, Comparative studies on polymeric-ceramic composites obtaining possibilities, ROMAT 2018, 15-18th November 2018, Bucharest, Romania.
- D156.O.E. Ilie, I.V. Antoniac, T.M. Butte, A. Maidaniuc, R.C. Ciocoiu, **F. Miculescu**, Studies on the possibilities of obtaining internal bone fixators using CAD design and 3D printing, ROMAT 2018, 15-18th November 2018, Bucharest, Romania.
- D157.V. Mitran, R. Ion, M. Miculescu, MG. Necula, **F. Miculescu**, A. Cimpean, Biocompatibility assessment and osteoblast response o seashell and marble derived hydroxyapatite, SNBC 2018.
- D158.V. Mitran, R. Ion, MG. Necula, T. Butte, **F. Miculescu**, A. Cimpean, In vitro macrophage behaviour on structures based on biogenic calcium phosphates, SNBC 2018.
- D159.A.C. Mocanu, M. Miculescu, T. Machedon-Pisu, A. Maidaniuc, S.I. Voicu, R.C. Ciocoiu, A.M. Pandele, M. Ionita, G.E. Stan, **F. Miculescu**, Internal and external surface features of newly developed porous ceramics with random interconnected 3d channels by fibrous sacrificial porogen method, BRAMAT 2019, 11th International Conference on Materials Science & Engineering, Brasov, Romania, 2019.
- D160.A. Maidaniuc, M. Miculescu, T.M. Butte, L.M. Boldu, R.C. Ciocoiu, G.E. Stan, I.V. Antoniac, T. Machedon-Pisu, **F. Miculescu**, Effect of processing parameters on the morphology, surface and mechanical properties of sintered ceramics prepared from fish bone, BRAMAT 2019, 11th International Conference on Materials Science & Engineering, Brasov, Romania, 2019.
- D161.C.A. Dascălu, I. V. Antoniac, A. Maidaniuc, A.M.Pandele, S.I. Voicu, T. Machedon-Pisu, G.E. Stan, A. Cîmpean, V. Mitran, **F. Miculescu**, Synthesis and characterization of biocompatible polymer-ceramic film structures as favorable interface in guided bone regeneration, BRAMAT 2019, 11th International Conference on Materials Science & Engineering, Brasov, Romania, 2019.
- D162.N. Levința, Z. Vuluga, F. Miculescu, M.C. Corobeia, C.A. Nicolae, R. Gabor, A.A. Mâineanu, G.M. Teodorescu, Nanocomposites based on polyamide 6/halloysite versus polyamide 6/hydrotacite, RICCCE 21, 21st Romanian International Conference on Chemistry and Chemical Engineering, 4-7 September 2019, Constanța, Romania.

#### **Invited speaker at international conferences**

- F. Miculescu et. all, Changes in the microstructure of the thin layers Cu-Ni-Cu-Fr with applications in biosensors, 6th International Conference Biomaterials, Tissue Engineering & Medical Devices, BIOMMEDD'2012, Constanța, Romania.
- F. Miculescu, Methods of inducing the hydroxyapatite particles' characteristics required for 3D printing, International Seminar on Biomaterials & Regenerative Medicine, BIOREMED 2015, Oradea, Romania.
- F. Miculescu, Guided improvement of biological apatite particles for bone tissue engineering applications, European Conference on Orthopedic Biomaterials, ECOB 2015, București, Romania.
- F. Miculescu, Thermal Processing Routes for Tunable Calcium Phosphates Derived from Natural Origin Materials, 7th International Conference Biomaterials, Tissue Engineering & Medical Devices, BIOMMEDD'2016, Constanța, Romania.
- F. Miculescu, Sintering strategies for bovine bone-derived hydroxyapatite and its microcomposites, 6th International Conference on Materials Science and Technologies – RoMat 2016, București, Romania.
- F. Miculescu, Sustainable use of biogenic resources for developing calcium phosphates bioceramics and microcomposites with tunable bulk and surface characteristics, The International Seminar on Biomaterials and Regenerative Medicine BIOREMED 2017, 5-8 octombrie 2017, Timisoara, România.
- F. Miculescu, Innovative sintering additives for naturally-derived calcium phosphates, ROMAT 2018, 15-18th November 2018, Bucharest, Romania.
- F. Miculescu, Land and marine calcium sources for sustainable preparation of high-value biomaterials, Biommedd 2018, 27-29th September 2018, Cluj-Napoca, Romania.
- F. Miculescu, Technologies for bone reconstruction biomaterials, using ceramics from natural sources and porogen agents, BRAMAT 2019, 11th International Conference on Materials Science & Engineering, Brasov, Romania, 2019.
- F. Miculescu, Sustainable technologies for bone reconstruction ceramic biomaterials derived from natural sources and porogen agents, International Seminar on Biomaterials and Regenerative Medicine, 26-28 September 2019, Craiova, Romania.

- F. Miculescu, Sustainable technologies for bone reconstruction ceramic biomaterials derived from natural sources and porogen agents, RICCCE 21, 21<sup>st</sup> Romanian International Conference on Chemistry and Chemical Engineering, 4-7 September 2019, Constanta, Romania.

#### **Chairman at international conferences**

- Chairman at the European Conference on Orthopedic Biomaterials, ECOB 2015, Bucuresti, Romania.
- Chairman at the International Seminar on Biomaterials & Regenerative Medicine, BIOREMED 2015, Oradea, Romania.
- Chairman at the 7<sup>th</sup> International Conference Biomaterials, Tissue Engineering & Medical Devices, BIOMMEDD'2016, Constanta, Romania.
- Chairman at the 6<sup>th</sup> International Conference on Materials Science and Technologies – RoMat 2016, Bucuresti, Romania.
- Chairman at Session 4 – Conferința Internațională Technologies for the fabrication and characterization of 3D scaffolds for tissue engineering – NoRoTech, 08.06.2017, Bucuresti, Romania.
- Chairman at Session OP-63, Natural Biomaterials, 28th Annual Meeting of the European Society for Biomaterials (ESB 2017), Atena, Grecia.
- Chairman at The International Seminar on Biomaterials and Regenerative Medicine BIOREMED 2017, Timisoara, România.
- Chairman at the International Seminar on Biomaterials and Regenerative Medicine BIOREMED 2017, Timisoara, România.
- Chairman at the 8<sup>th</sup> International Conference Biomaterials, Tissue Engineering & Medical Devices, BIOMMEDD'2018, Bucuresti, Romania
- Chairman at 7<sup>th</sup> International Conference on Materials Science and Technologies – RoMat 2018, Bucuresti, Romania.
- Chairman at The International Seminar on Biomaterials and Regenerative Medicine BIOREMED 2019, Craiova, Romania.

#### **Member of editorial board**

- **Member of Editorial Board:** Journal of Functional Biomaterials, MDPI
- **Member of Editorial Board:** Journal of Advanced Biotechnology and Bioengineering, Synergy Publishers
- **Topic Editorial Board:** Metals, MDPI (Q1)
- **Guest Editor:** Journal of nanomaterials, Graphene Based Composites: From Theories to Advanced Applications, Hindawi Publishing Corporation 2016
- **Guest Editor:** Materials, Biomaterials and Implant Biocompatibility, MDPI, (Q2) 2018-2019
- **Guest Editor:** Materials, The Synthesis and Characterization of Biocompatible Materials, MDPI, (Q2) 2019-2020
- **Guest Editor:** Metals, MDPI, Metals as Biomaterials, (Q) 2019-2020
- **Guest Editor:** Journal of Functional Biomaterials, MDPI, Bioceramics and Bioactive Glass-Based Materials

#### **Research Contracts as Manager or Responsible**

- Grant CNCSIS Tema 11, Cod 190/2002, "Noi metode de investigare a mecanismelor care intervin în procesul de interacțiune biomaterial-țesut" **Contract manager**. (3 years)
- Contract CEEX nr.121/10.10.2005, "Analiza aprofundată privind implicațiile structurale rezultate din utilizarea combustibililor alternativi la fabricarea cimentului", IARIS, **Contract Responsible**. (3 years)
- Contract CEEX nr. 10-89/2006, "Producerea și studiul comportării acoperirilor din carbon, wolfram și beriliu folosit la primul perete al instalațiilor de fuziune termonucleară", FUSITERMAT, **Contract Responsible**. (2 years)
- Contract CNMP Nr. 71-032/2007, "Valve de Spin: De la metode combinatoriale de procesare la proprietăți performante", VALS, **Contract Responsible**. (3 years)
- Contract CNMP Nr. 72-223/2008, "Cercetări avansate pentru producerea acoperirilor combinatoriale de interes pentru fuziune", CAPACIF, **Contract Responsible**. (3 years)
- Contract TE Nr.144/2010. "Metode combinate de evaluare a trasabilității contaminării persoanelor cu metale grele în corelație cu metabolismul țesuturilor dure umane", **Contract manager**. (3 years)
- Contract PN-II-RU-TE-2014-4-0590 297, "Tehnologie integrată pentru fabricarea de implanturi biomimetice personalizate utilizate la reconstrucția defectelor osoase majore" BioMimBone, **Contract manager**. (3 years)

- Contract PN-III-P2-2.1-PED-2016-0892, PED-2016-1657, "O nouă tehnologie pentru sinteza și fabricarea implanturilor biomimetice derivate din surse biogene utilizate pentru chirurgia reconstructivă osoasă", BiomMS, **Contract manager**. (2 years)

#### **Member in research teams**

#### **International research grants**

- 1) FP6 "Magnesium forged components for structural lightweight automotive applications", MAGFORGE (3 years)
- 2) FP6-Marie Curie Actions-ToK; Contract nr. 014059/2005; Intensive Program for Transfer of Knowledge to Eastern Europe Reference Pole for Micro- and Nanotechnologies (NANOTEC-EST), (3 years)
- 3) FP7-NMP-2007-LARGE-1, Project nr.293104/2008, Novel biofunctional polymer scaffolds and techniques for the regeneration and repair of degenerate intervertebral disc, Acronym Disc Regeneration; Collaborative Project; Large-scale integrating project; Work programme topics addressed: NMP-2007-2.3-1; (3 years)
- 4) COST MP0602 - "Advanced Solder Materials for High Temperature Application (HISOLD)", Contract manager Prof.Dr.Ing. Svasta Paul. (3 years)
- 5) COFUND-M-ERA.NET II-BIOMB 2017–2020, Advanced biodegradable materials based on MgB2 resistant to microbial colonization (3 years)

#### **National research grants team member or key person**

- 1) Contract BIOTECH Nr.82/2001, Modelarea și cuantificarea interacțiilor biomaterialelor și implantelor cu mediul gazdă și/sau tesut implantat prin metode avansate, Contract manager Caloianu Maria. (3 years)
- 2) Contract RELANSIN S9 Nr. 1473/2001, Centru de biomateriale, Contract manager Prof.Dr.Ing Zamfir Simona. (3 years)
- 3) Contract RELANSIN S13 Nr. 1474/2001, Realizarea protezelor articulare de șold, Contract manager Brânzei Mihai. (3 years)
- 4) Contract RELANSIN S1 Nr. 22/2002, Studiul proceselor la interfață strat substrat implicate în obținerea biomaterialelor, Contract manager Prof.Dr.Ing. Zamfir Simona. (3 years)
- 5) Contract INVENT S2 Nr. 101/2003, Componenta femurală pentru proteza totală de șold, Contract manager Orban Horia Bogdan. (3 years)
- 6) Contract RELANSIN S3 Nr. 1666/2003, Tehnologie modernă de realizare a grupului rotoric ce echipează compresoarele centrifugale de aer, Contract manager Prof.Dr.Ing. Zamfir Simona. (2 years)
- 7) Contract RELANSIN S1 Nr. 1717 / 2003, Tehnologii moderne de obținere și prelucrare a biomaterialelor metalice destinate implanturilor dentare, Responsabil contract Prof.Dr.Ing. Simona Zamfir. (2 years)
- 8) Contract RELANSIN / Nr. 1740/2003, Tehnologii noi pentru fabricarea de etaloane spectrale din oțeluri și aliaje complexe, Responsabil contract Pencea Ion. (2 years)
- 9) Contract RELANSIN S8 Nr. 1771/2003, Laborator mobil pentru determinarea de la distanță a amprentei termice a tehnicii militare în gama spectrală 2 – 5 μm și 8 – 12 μm, Contract manager Conf.Dr.Ing. Pencea Ion. (2 years)
- 10) Contract RELANSIN S3 Nr. 1868/2003, Realizarea și dezvoltarea unui echipament de ambalat etanș, în folie termo-contractabilă și termosudabilă a produselor sau grupăriilor de produse alimentare și nealimentare, Contract manager Moldovan Laurentiu (2 years)
- 11) Contract CERES Nr. 4-116/2004, Cercetari privind influența gradului de prelucrare al suprafetei biomaterialelor metalice asupra proceselor de osteointegrare în tesuturile biologice, Responsabil contract CEEX Prof.dr.ing. Bunea Daniel. (2 years)
- 12) Contract CERES Nr. 4-183/2004, Optimizarea tratamentului termic de durificare cu laser în vederea creșterii rezistenței la uzare-corozione a oțelurilor inoxidabile, Contract manager Prof.Dr.Ing. Zamfir Simona. (2 years)
- 13) Contract CERES Nr. 4-184/2004, Studiul transformărilor structurale care au loc în straturile superficiale ale oțelurilor inoxidabile supuse acțiunii radiației laser, Contract manager Prof.Dr.Ing. Zamfir Simona. (2 years)
- 14) Contract RELANSIN S3 Nr. 1953/2004, Tehnologii modernizate de producere a conservelor, în conformitate cu cerințele și exigențele pieței uniunii europene, Contract manager Boca Elena. (2 years)
- 15) Contract RELANSIN S3, Subcontract Nr. 1964/2004, Modernizarea echipamentelor și aplicațiilor în transportul și distribuția gazelor naturale prin realizarea și utilizarea de adezivi și paste de etanșare cu proprietăți specifice, APEG, Contract manager Prof.Dr.Fiz. Bojin Dionezie. (2 years)
- 16) Contract RELANSIN S3, PDT, 2025/2004, Realizarea tehnologiei de prelucrare a unor aliaje biocompatibile pe bază de metale nobile, Contract manager Prof.Dr.Ing. Răducanu Doina. (2 ani)
- 17) Contract RELANSIN Nr. 2146/2004, Gamă de depărtătoare autostatice cu multiple aplicații chirurgicale, Contract manager Antoniac Iulian. (1.5 years)

- 18) Contract AGRAL S5, Nr. 267/2004, Realizarea si dezvoltarea unui echipament modern, destinat ambalarii produselor alimentare portionate, prin metoda top sealing, Contract manager Antoniac Iulian. (2 years)
- 19) Contract RELANSIN Nr.2001/2004, Studiu heterogenității endoteliale, morfologice și funcționale în insuficiență cardiacă, relevanță hemodinamică. Contract manager Prof.Dr.Ing. Ciucă Ion. (2 years)
- 20) Contract CEEEX 46/2005 Retea tehnologica integrata de cercetare a structurilor avansate biocompatibile pentru implanturi dentare, Rete-β-dent, Responsabil contract Prof.dr.ing. Târcolea Mihai. (3 years)
- 21) Contract CEEEX Nr. 55/2005, Corelația dintre disfuncția endotelială și afectarea miocardică la pacienții cu diabet zaharat, CARDIAB, Contract manager Prof.Dr.Ing. Coșmeleață Georgeta. (3 years)
- 22) Contract CEEEX INFOSOC 43/2005, Sistem informațional privind asigurarea climatului de încredere și a confidențialității documentelor - managementul identității, Si-MI. Contract manager Conf.Dr.Fiz. Pencea Ion. (3 years)
- 23) Contract CEEEX Nr. 21/2006, Dinamica si structura fluxului in supraconductori nanostructurati sau cvasi-bidimensionali, FLUXDIN, Contract manager Prf.Dr.Fiz. Bojin Dionezie. (2 years)
- 24) Contract CEEEX Nr. 06-10-82/2006 Cercetari avansate privind dezvoltarea unei structuri de moderare, focalizare si accelerare fascicule de pozitroni monoenergetici in domeniul 0,8- 50 keV, utilizata la determinarile de defecte de tip vacanta sau aglomerari de goluri in materia condensata, TUN POZITRONIC, Contract manager Prof.Dr.Fiz. Bojin Dionezie. (2 years)
- 25) Contract CEEEX AMTRANS Nr. X2C30/2006, Materiale multistrat pentru condiții termice extreme în aeronautică. Instalație și metodă de testare, MMCTE, Contract manager Prof.Dr.Fiz. Bojin Dionezie. (3 years)
- 26) Contract Nr. 78GR/2006, Subcontract CNCSIS Cod 91, Modelarea proceselor fizico-chimice în elaborarea unei metode noi, ecologice, de obținere a titanului, Contract manager Prof.Dr.Ing. Târcolea Mihail. (1 year)
- 27) Contract CEEEX Nr. 94/2006, Cercetări fundamentale și experimentale privind biomaterialele cu memoria formei cu aplicabilitate în realizarea stenturilor vasculare, Contract manager Prof.Dr.Ing. Ciucă Ion. (2 years)
- 28) Contract CEEEX Nr. 116/2006, Studii fundamentale privind integrarea osoasa si epitelio-conjunctiva a implantului dentar in scopul cresterii performantelor pe termen lung, DIOBONE, Contract manager Prof.Dr.Fiz. Bojin Dionezie. (3 years)
- 29) Contract CEEEX RELANSIN Nr. 142/2006, Cercetari privind eco-ingineria produselor de protectie anticorosiva peliculogene, ECOINGPRO, Contract manager Prof.Dr.Fiz. Bojin Dionezie. (2 years)
- 30) Contract CEEEX-VIASAN Nr. 150/2006, Dezvoltarea de noi tehnici Laser pentru proiectarea si fabricarea de biosenzori, BIOSENSOR, Responsabil contract Conf.dr.ing. Ciucă Sorin. (3 years)
- 31) Contract CEEEX Relansin Nr. 152/2006, Tehnologii avansate utilizând senzori de proces pentru obținerea de straturi rezistente la uzură, coroziune și oboseală, TEH-DIF-AV, Contract manager Prof.Dr.Ing. Ciucă Ion. (3 years)
- 32) Contract CEEEX RENAR P-CONFORM Nr. 164 (2673) /2006, Laborator de evaluare a conformității materialelor și produselor prin încercări spectrochimice de emisie în UV-VIZ (OES) și fluorescență a radiațiilor X (XRF), LECOMP-SPECTRO. (2 years)
- 33) Contract CEEEX-VIASAN 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, MEBIOS, Responsabil S.I.dr.ing. Antoniac Iulian. (2 years)
- 34) Contract CEEEX Nr.166/P1/2006, Cercetari privind preprocesarea materialelor compozite avansate cu matrice metalica MMCs si ceramica CMCs, MAT-COM, Responsabil contract Prof.dr.fiz. Bojin Dionezie. (2 years)
- 35) Contract CEEEX Nr. 223/2006, Materiale noi biocompatibile pentru implantologie ortopedica, BIOCOP, Responsabil contract Prof.dr.ing. Geantă Victor. (2 years)
- 36) Contract CEEEX RELANSIN Nr.235/2006, Biofunctionalizarea suprafetei implanturilor pentru osteosinteza, OSTEOSURF, Contract manager S.I.dr.ing. Antoniac Iulian. (2 years)
- 37) Contract CEEEX RELANSIN Nr. 287/2006, Tehnologii avansate de mediu pentru reducerea poluării rezultate din deversarea efluenților specifici industriei energetice, utilizând materiale carbonice active cu precursori indigeni ieftini. CARBPOL, Contract manager Prof.Dr.Fiz. Pencea Ion (2 years)
- 38) Contract CEEEX RELANSIN Nr. 297/2006, Cercetari privind mecanismul durificarii si stabilitatea la cald a otelurilor de tip maraging, MEDUR, responsabil Conf.dr.ing. Brânzei Mihai. (2 years)
- 39) Contract CEEEX RELANSIN Nr. 301-2006, Metode, procedee performante și aplicații tehnologice privind integrarea de noi materiale în dezvoltarea conceptuală a componentelor modulare, multifuncționale și de înaltă precizie utilizate în cadrul sistemelor inteligente de prelucrare. Contract manager Prof.Dr.Ing. Ciucă Ion. (2 years)
- 40) Contract CNMP Nr. 31-001/2007, Sistem mobil de monitorizare rapidă a agenților biologici și chimici pentru obiective de importanță strategică, Contract manager Prof.Dr.Fiz. Bojin Dionezie. (3 years)
- 41) Contract Nr. 71-008-1/2007, Materiale avansatemicrocristaline cu aplicații în utilizarea energiei electrice, MICROMAT, Contract manager Prof.Dr.Ing. Moldovan Petru. (2 years)

- 42) Contract CNMP Nr. 71-059/2007, Tehnologii inovative de realizare a unor produse din aliaje tip Permalloy competitive la export PERMATECH, Contract manager Prof.Dr.Ing. Şaban Rami. (3 years)
- 43) Contract CNMP Nr. 71-080/2007, Materiale multifuncționale cu efect bioactiv destinate implantologiei MULTIBIOMAT, Contract manager Prof.Dr.Ing. Coșmeleață Georgeta. (3 years)
- 44) Contract CNMP Nr. 81-002/2007, Sistem mobil de detecție, identificare și monitorizare biologică și chimică, LITECAT, Contract manager Prof.Dr.Fiz. Bojin Dionezie. (3 years)
- 45) Contract INOVARE Nr. 115/2007, Tehnologii integrate pentru realizarea unor materiale biocompatibile complexe, BIOCOMPLEXMAT, Contract manager Prof.Dr.Ing. Coșmeleață Georgeta. (2 years)
- 46) Contract CNMP Nr. 32-165/2008, Medii de epurare controlată a apelor contaminate chimic și biologic, Contract manager Prof.Dr.Fiz. Bojin Dionezie. (3 years)
- 47) Contract Nr. 42-132/2008, "Parteneriate in domeniile prioritare", Programul 4, Domeniul 4, Dispozitiv medical pentru tratarea afectiunilor articulare bazat pe nanomateriale si efectele campului magnetic, ARTROMAG, Contract manager Marinescu Rodica. (3 years)
- 48) Contract Nr. 72-180/2008, "Parteneriate in Domeniile Prioritate", Domeniul 7, Programul 4, Materiale nanostructurate pentru functionalizarea suprafetelor endoprotezelor articulare cu uzura redusa - COAT4JOINTS, Contract manager Antoniac Iulian. (3 years)
- 49) Contract Nr. 72-192/2008, "Parteneriate in domeniile prioritare", Domeniul 7, Programul 4, Implanțe resorbabile utilizate in artroscopie realizate din biomateriale biomimetice, AURABIOMAT, Contract manager Antoniac Iulian. (3 years)
- 50) Contract Nr. 72-221/2008, "Parteneriate in domeniile prioritare", Metodă nouă de protecție anticorozivă a materialelor din oțel prin electrodepunerea de filme subțiri din aliaje ternare Zn-Ni-P, Contract manager Prof.Dr.Ing. Târcolea Mihail. (3 years)
- 51) Contract nr. 175/2012, Straturi subțiri biocompatibile pentru îmbunătățirea aderenței ceramică-metal în restaurările dentare –COST4DENT, Contract manager S.I.Dr.Ing. Cosmin Cotruț. (3 years)
- 52) PN-II-PT-PCCA-2013-4-1296, Complex systems with deformable structure for ballistic protection of armored vehicles involved in asymmetric conflicts
- 53) PN-II-PT-PCCA-2013-4-2119, Therapeutic strategies for enhancing bone healing response by using bioactive coatings for bioabsorbable magnesium-based implants
- 54) PN-II-PT-PCCA-2013-4-2267, Biodegradable implants from magnesium alloys used in foot and ankle surgery
- 55) PN-II-PT-PCCA-2013-4-1958, Multifunctional coatings for load bearing implants made of a novel titanium-based alloy
- 56) PN-II-PT-PCCA-2013-4-2287, Magnetic biomimetic scaffolds as alternative strategy for bone tissue repair and engineering
- 57) PN-II-PT-PCCA-2013-4-1048, New high entropy alloys/composites with superior mechanical and corrosion resistance characteristics, for high temperature applications
- 58) PN-II-PT-PCCA-2013-4-1065, MgB<sub>2</sub> based superconducting tapes
- 59) PN-II-RU-TE-2014-4-0292, Nanostructured membrane reactors for derivatization and doping of carbon nanotubes and graphenes

#### National and International Awards

- 2<sup>nd</sup> place at the International Conference Journées Scientifiques du CFBD, 2003, Neuchâtel, l'Espace Perrier de Marin-Epanier, Suisse, D.Bunea, D.Bojin, S.Zamfir, F.Miculescu, M.Miculescu, Experimental research concerning the Co-Cr-Mo alloys used in implantology.
- SRB Award 2005 - Posters - F. Miculescu, I. Antoniac, M. Miculescu, L.T. Ciocan, Influence of the implant surface preparation on the bone ingrowth, Al V-lea Simpozion Național de Biomateriale, Iași, România.
- SRB scholarship 2007.
- Mention at the XIII<sup>th</sup> Edition of the National Contest for Scientific Creation (SRM).
- SRB Excellence Award for the contribution in the biomaterials field in 2016.
- Grand Prize and Cup in recognition of high scientific contribution and loyalty to the XXI<sup>th</sup> International Salon of Research, Innovation and Technological Transfer “INVENTICA 2017”, Iași, Romania.
- Gold Medal at “INVENTICA 2017” for the patent proposal “Mechano – electrical drier” at the XXI<sup>th</sup> International Salon of Research, Innovation and Technological Transfer “INVENTICA 2017”, Iași, Romania.
- Gold Medal “INVENTICA 2017” for the patent proposal “Method for obtaining hydroxyapatite scaffolds with predetermined physico-chemical characteristics for major bone reconstruction” at the XXI th International Salon of Research, Innovation and Technological Transfer “Inventica 2017”, Iași, Romania.
- Gold Medal for the patent proposal “Mechano – electrical drier” at “Pro Invent” 2017, Cluj-Napoca, Romania.

- Gold Medal for the patent proposal “Procedeu de obținere a unui produs tip scaffold pe bază de hidroxiapatită, pentru reconstrucția defectelor osoase majore, cu proprietăți fizico-chimice predeterminate” at “Traian Vuia” 2017, Timișoara, Romania.
- Gold Medal for the patent proposal “Mechano – electrical drier” at “Traian Vuia”, 2017, Timișoara, Romania.
- Excellence Diploma and Special Prize (Trophy) for the patent proposal (RO001/2017) at “Traian Vuia”, 2017, Timișoara, Romania.
- Prize of Romanian Inventors Forum at European Exhibition of Creativity and Innovation “EUROINVENT 2017”, 25-27<sup>th</sup> May 2017, Iași, Romania.
- Gold Medal for the patent proposal “Method for obtaining hydroxyapatite scaffolds with predetermined physico-chemical characteristics for major bone reconstruction” at European Exhibition of Creativity and Innovation “EUROINVENT 2017”, Iași, Romania.
- Gold Medal for the patent proposal “Mechano – electrical drier” at European Exhibition of Creativity and Innovation “EUROINVENT 2017”, Iași, Romania.
- Excellence Diploma of the Moldovian Technical University “Mechano – electrical drier”
- Excellence Diploma and Gold Medal at the International Fair of Inventions and Practical Ideas Invent – Invest 2017, Ungheni, Republica Moldova, 12-15<sup>th</sup> November 2017 for “Method for Obtaining Hydroxyapatite Scaffolds with Predetermined Physico - Chemical Characteristics for Major Bone Reconstruction”.
- Gold medal for the patent proposal Method for Obtaining Hydroxyapatite Scaffolds with Predetermined Physico-Chemical Characteristics for Major Bone Reconstruction”, at the International Warsaw Invention Show IWIS 2017, Poland.
- The Great Prize of the Technical University of Cluj Napoca for Politehnica University from Bucharest, at Pro Invent 2018, for the patent proposal “Method for Obtaining Scaffolds with Predetermined Physico-Chemical Characteristics for Major Bone Reconstruction”, Cluj-Napoca, Romania.
- Excellence Diploma and Gold Medal for the patent proposal “Method for obtaining scaffolds with predetermined physico-chemical characteristics for major bone reconstruction”, RO131943(A0), at PRO INVENT, 2018, Cluj-Napoca, Romania.
- Excellence Diploma and Gold Medal for the patent “Procedeu de obținere a unui produs tip scaffold pe bază de hidroxiapatită, pentru reconstrucția defectelor osoase majore, cu proprietăți fizico-chimice predeterminate” (“Method for obtaining scaffolds with predetermined physico-chemical characteristics for major bone reconstruction”), at the Salon „Traian Vuia ‘19” ed. A V-a, 12-14<sup>th</sup> June 2019, Timisoara, Romania.
- Excellence Diploma and Inventica Medal 2019, for the patent “Mechano – electric laundry dryer”, at the XXII<sup>nd</sup> International Salon and Inventive Exhibition Inventica 2019, 26-28<sup>th</sup> June, Iasi, Romania.
- Excellence Certificate, for the patent “Mechano – electric laundry dryer”, at the Salon „Traian Vuia ‘19” ed. A V-a, 12-14<sup>th</sup> June 2019, Timisoara, Romania.
- Excellence Diploma of USAMVB Timisoara „Regele Mihai I al Romaniei”, for the patent “Procedeu de obținere a unui produs tip scaffold pe bază de hidroxiapatită, pentru reconstrucția defectelor osoase majore, cu proprietăți fizico-chimice predeterminate” (“Method for obtaining scaffolds with predetermined physico-chemical characteristics for major bone reconstruction”), at the Salon „Traian Vuia ‘19” 5<sup>th</sup> ed, 12-14<sup>th</sup> June 2019, Timisoara, Romania.
- Special Prize of UMFT „Victor Babes” of Timisoara, for the patent “Procedeu de obținere a unui produs tip scaffold pe bază de hidroxiapatită, pentru reconstrucția defectelor osoase majore, cu proprietăți fizico-chimice predeterminate” (“Method for obtaining scaffolds with predetermined physico-chemical characteristics for major bone reconstruction”), at the Salon „Traian Vuia ‘19” 5<sup>th</sup> ed, 12-14<sup>th</sup> June 2019, Timisoara, Romania.
- „Davidoni” Special Prize for the patent “Procedeu de obținere a unui produs tip scaffold pe bază de hidroxiapatită, pentru reconstrucția defectelor osoase majore, cu proprietăți fizico-chimice predeterminate” (“Method for obtaining scaffolds with predetermined physico-chemical characteristics for major bone reconstruction”), at the Salon „Traian Vuia ‘19” 5<sup>th</sup> ed, 12-14<sup>th</sup> June 2019, Timisoara, Romania.
- Euroinvent Medal for the Patent “Method for obtaining scaffolds with predetermined physico-chemical characteristics for major bone reconstruction”, at the Romanian Inventors Forum, 14-16<sup>th</sup> October 2019, Iași, Romania.
- Special Award from the Chinese Innovation & Invention Society (Taiwan) for the Patent “Method for obtaining scaffolds with predetermined physico-chemical characteristics for major bone reconstruction”, at the XIII<sup>th</sup> International Warsaw Invention Show “IWIS”, 16<sup>th</sup> October 2019, Warsaw, Poland.

- Gold Medal for the Patent "Method for obtaining scaffolds with predetermined physico-chemical characteristics for major bone reconstruction", at the XIII<sup>th</sup> International Warsaw Invention Show "IWIS", 16<sup>th</sup> October 2019, Warsaw, Poland.
- Certificate of Excellence for the Patent "Mechano – electric laundry dryer", from the "Iustin Capră" Association of Inventors, 2019.
- Gold Medal for the Patent "Method for obtaining scaffolds with predetermined physico-chemical characteristics for major bone reconstruction", at the Hrvatski Salon Inovacija S Medunarodnim Sudjelovanjem - INOVA, 13-16<sup>th</sup> November 2019, Zagreb, Croatia.
- Special Award by Norton University for the Patent "Method for obtaining scaffolds with predetermined physico-chemical characteristics for major bone reconstruction", at the Hrvatski Salon Inovacija S Medunarodnim Sudjelovanjem - INOVA, 13-16<sup>th</sup> November 2019, Zagreb, Croatia.
- Special Honour of Invention from TISIAS Toronto International Society of Innovation & Advanced Skills, for the Patent "Method for obtaining scaffolds with predetermined physico-chemical characteristics for major bone reconstruction", at the Hrvatski Salon Inovacija S Medunarodnim Sudjelovanjem - INOVA, 13-16<sup>th</sup> November 2019, Zagreb, Croatia.
- >20 CNCSIS – awards for research articles.

#### **Patents**

- Patent No. 131500/2019 „Mechano – electric laundry dryer”, F. Miculescu, M. Miculescu, M.C. Costoiu, O.R. Chivu, C.A. Barbu, A. Semenescu.
- Patent No. 131943/2019 „Method for obtaining scaffolds with predetermined physico-chemical characteristics for major bone reconstruction”, F. Miculescu, A. Maidaniuc, M.C. Costoiu, A. Semenescu, M. Miculescu, F. Ioniță-Radu, M. Arghirescu.

#### **Developed research laboratories**

- 2001 – Electron microscopy and microanalysis (UPB - JK011)
- 2012 – Materials characterisation and analysis methods (UPB - JK210)
- 2017 – Biomaterials and nanomaterials synthesis and processing (UPB - JK005)
- 2018 – Transmission electron microscopy (UPB – JI004 – JI005)

#### **Extracurricular activities**

- Board member, Treasurer of the Romanian Society of Biomaterials SRB 2013-2015/2018-2020.
- Board member, President of the Romanian Society of Biomaterials SRB 2015-2017.
- Founding member of the Romanian Microscopy Society 2013.
- Member in CNATDCU Commission of Materials Engineering 2016-2020.
- Expert evaluator in the Materials Commission 2016-present.

#### **Research journals reviewer**

- Materials Letters
- Materials Chemistry and Physics
- Carbohydrate Polymers
- PLOS ONE
- Materials Science in Semiconductor Processing
- Materials&Design
- Optics & Laser Technology
- Additive Manufacturing
- Multidiscipline Modeling in Materials and Structures
- Polymers
- Nanomaterials
- Metals
- Materials
- Coatings
- Journal of Adhesion Science and Technology
- Journal of the Australian Ceramic Society
- Helyion
- Corrosion Reviews
- Engineering Science and Technology, an international journal
- Journal of Optoelectronics and Advanced Materials

- Key Engineering Materials
- Advanced Materials Research
- Buletinul UPB seria B

**International conferences reviewer**

BiomMedD2014, RoMat2014, BioRemed2015, ECOB2015, Materials and Technologies in Dentistry: Defects, Processing and Characterization, Orthopedic Biomaterials – From Materials Science to Clinical Applications, BiomMedD2016, RoMat2016, BioRemed2017, RoMat2018, BiomMedD2018.

**Date,**  
28.05.2020

**Signature,**  
Prof. Florin Miculescu