Lista lucrarilor publicate

Articole stiintifice

2024

- In Situ Fabrication of TiC/Ti–Matrix Composites by Laser Directed Energy Deposition, S. Mihai , F. Baciu , R. Radu, D. Chioibasu, A.C. Popescu, Materials, 17(17) (2024) 4284
- A novel method of nondestructive characterization via X-ray and high-speed imaging of TiC/IN718 composite materials manufactured by LMD, Mihai S., P. V. Toma , A. Sima , D. Chioibasu , A.C. Popescu, Results in Engineering, 24 (2024) 103350
- Printed layers height calibration curve and porosity in laser melting deposition of Ti6Al4V combining experiments, mathematical modelling and deep neural network, MA Mahmood, C Diana, U Sajjad, S Mihai, I Tiseanu, AC Popescu, Rapid Prototyping Journal 30 (3) (2024) 415-429

2022

- Post-Processing Techniques to Enhance the Quality of Metallic Parts Produced by Additive Manufacturing, M. A. Mahmood, D. Chioibasu, A. Ur Rehman, S. Mihai, A. C. Popescu, Metals 12 (2022) 77
- Grain-based morphological simulation via fractal theory with experimental verification and corresponding optical properties in laser melting deposition additive manufacturing: A demystified approach, M. A. Mahmood, A. Ur Rehman, K. Ishfaq, A. C. Popescu, M. Bojan, I. N. Mihailescu, Applied Mathematical Modelling 109 (2022) 304-317
- Laser additive manufacturing of bulk and powder ceramic materials: mathematical modeling with experimental correlations, M.A Mahmood, A.C.Popescu, M. Oane, C.Ristoscu, I.N. Mihailescu 2022, Rapid Prototyping Journal, https://doi.org/10.1108/RPJ-07-2021-0179

2021

- 3D Printing at Micro-Level: Laser-Induced Forward Transfer and Two-Photon Polymerization, M. A. Mahmood, A.C. Popescu, Polymers 13 (2021) 2034
- Real-Time Defects Analyses Using High-Speed Imaging during Aluminum Magnesium Alloy Laser Welding, S. Mihai, D. Chioibasu, M. A. Mahmood, L. Duta, M. Leparoux, A. C. Popescu, Metals 11 (2021) 1877
- Non-Destructive X-ray Characterization of a Novel Joining Method Based on Laser-Melting Deposition for AISI 304 Stainless Steel,M.A. Mahmood , D. Chioibasu , S. Mihai, M. Iovea, I. N. Mihailescu, A. C. Popescu. Materials. 14(24) (2021) 779
- Thermal Nonlinear Klein–Gordon Equation for Nano-/Micro-Sized Metallic Particle–Attosecond Laser Pulse Interaction, M. Oane , M. A.Mahmood, A. C. Popescu, A. Bănică, C. Ristoscu, I. N. Mihăilescu, Materials 14 (2021) 857
- In-depth analyses of p-type silicon solar cells: A comparison between commercial compact and laboratory LIBS systems, M. A. Benelmouaz, S. A. Beldjilali, S. Messaoud

Aberkane, A. Stancalie, A. Chita, K. Yahiaoui, D. Bouhafs; A. C. Popescu, E. Axente, Optik, 247 (2021) 168038

- Bridging the analytical and artificial neural network models for keyhole formation with experimental verification in laser melting deposition: A novel approach, M. A. Mahmood, A. C. Popescu, M. Oane, A. Channa, S. Mihai, C. Ristoscu, I. N. Mihailescu, Results in Physics 26 (2021) 104440
- Spatter Formation and Splashing Induced Defects in Laser-Based Powder Bed Fusion of AlSi10Mg Alloy: A Novel Hydrodynamics Modelling with Empirical Testing ,A. U. Rehman, M. A. Mahmood, P. Ansari, F. Pitir, M. U. Salamci, A. C. Popescu, and I. N. Mihailescu, Metals 11 (12) (2021) 2023
- Grain refinement and mechanical properties for AISI304 stainless steel single-tracks by laser melting deposition: Mathematical modelling versus experimental results Muhammad Arif Mahmood, Andrei C. Popescu , Mihai Oane, Diana Chioibasu, Gianina Popescu-Pelin, Carmen Ristoscu, Ion N. Mihailescu, Results in Physics 22 (2021) 103880
- Mesoscopic Computational Fluid Dynamics Modelling for the Laser-Melting Deposition of AISI 304 Stainless Steel Single Tracks with Experimental Correlation: A Novel Study, A. Ur Rehman , M. A. Mahmood, F. Pitir, M. U. Salamci, A. C. Popescu, I. N. Mihailescu, Metals. 11(10) (2021) 1569.
- Keyhole Formation by Laser Drilling in Laser Powder Bed Fusion of Ti6Al4V Biomedical Alloy: Mesoscopic Computational Fluid Dynamics Simulation versus Mathematical Modelling Using Empirical Validation, A. U. Rehman, M. A. Mahmood, F. Pitir, M. U. Salamci, A. C. Popescu, I. N. Mihailescu, Nanomaterials 11 (12) (2021) 3284

2020

- Non-Fourier Estimate of Electron Temperature in Case of Femtosecond Laser Pulses Interaction with Metals, A. M. Bucă, M. Oane, M. A. Mahmood, I. N. Mihăilescu, A. C. Popescu, B. A. Sava, C. Ristoscu, Metals 10 (2020) 606
- Metal Matrix Composites Synthesized by Laser-Melting Deposition: A Review, M.A. Mahmood; A.C. Popescu; I.N. Mihailescu, Materials 13 (2020) 2593.
- Three-Jet Powder Flow and Laser–Powder Interaction in Laser Melting Deposition: Modelling Versus Experimental Correlations, M.A. Mahmood, A.C. Popescu, M. Oane, C. Ristoscu, D. Chioibasu, S . Mihai, I. N. Mihailescu, Metals, 10 (2020) 1113.
- Estimation of clad geometry and corresponding residual stress distribution in laser melting deposition: analytical modeling and experimental correlations, M. A. Mahmood, A. C. Popescu, C. L. Hapenciuc, C. Ristoscu, A. I. Visan, M. Oane, I. N. Mihailescu, International Journal of Advanced Manufacturing Technology 111 (2020) 77-91
- In vivo assessment of bone enhancement in the case of 3D printed implants coated with lithium-doped biological-derived hydroxyapatite coatings: a preliminary study on rabbits, L. Duta, J. Neamtu, R. Melinte, O.A. Zureigat, G. Popescu-Pelin, D. Chioibasu, F.N. Oktar, A.C. Popescu, Coatings, 10 (2020) 992

2019

- "Animal Origin Bioactive Hydroxyapatite Thin Films Synthesized by RF-Magnetron Sputtering on 3D Printed Cranial Implants." D. Chioibasu; L. Duta; G. Popescu-Pelin;

N. Popa; N. Milodin; S. Iosub; L. M. Balescu; A. Catalin Galca; A. Claudiu Popa; F. N. Oktar; G. E. Stan; A. C. Popescu, Metals 9 (2019) 1332.

- "Lithium-Doped Biological-Derived Hydroxyapatite Coatings Sustain In Vitro Differentiation of Human Primary Mesenchymal Stem Cells to Osteoblasts"; E. P. Florian, L. Duta, V. Grumezescu, G. Popescu-Pelin, A. C. Popescu, N. F. Oktar, W. R. Evans, A. Roseanu Constantinescu, Coatings, 9 (2019) 781.
- "Current Status on Pulsed Laser Deposition of Coatings from Animal-Origin Calcium Phosphate Sources", L. Duta, A.C. Popescu, Coatings 9 (2019) 335.
- „Pulsed Laser Deposited Biocompatible Lithium-Doped Hydroxyapatite Coatings with Antimicrobial Activity", L. Duta, M. C. Chifiriuc, G. Popescu-Pelin, C. Bleotu, G. P. Gradisteanu, M. Anastasescu, A. Achim, A. C. Popescu, Coatings 9 (2019) 54.
- „Prototype Orthopedic Bone Plates 3D Printed by Laser Melting Deposition", D. Chioibasu, A. Achim; C. Popescu, G. E. Stan, I. Pasuk, M. Enculescu, S. Iosub, L. Duta, A. C. Popescu, Materials 12 (2019) 906.

2018

- "Histamine detection using functionalized porphyrin as electrochemical mediator", A.M. Iordache, R. Cristescu, E. Fagadar-Cosma, A.C. Popescu, A.A. Ciucu, S. M. Iordache, A. Balan, C. Nichita, I. Stamatin, D.B.Chrisey, Comptes Rendus Chimie 21 (3-4) (2018) 270-276
- "Laser-Direct Writing by Two-Photon Polymerization of 3D Honeycomb-Like Structures for Bone Regeneration", I.A. Paun, R.C. Popescu , C.C. Mustaciosu, M. Zamfirescu, B.S. Calin, M. Mihailescu, M. Dinescu, A. Popescu, D. Chioibasu, M. Sopronyi, C.R. Luculescu, Biofabrication 10 (2) (2018) 025009
- "Electrically responsive microstructured polypyrrole-polyurethane composites for stimulated osteogenesis", C.R. Luculescu, A.M. Acasandrei, C.C. Mustaciosu, M. Zamfirescu, M. Dinescu, B.S. Calin, A. Popescu, D. Chioibasu, D. Cristian, I.A. Paun, Applied Surface Science 433 (2018) 166-176
- "Physical-chemical characterization and biological assessment of simple and lithium-doped biological-derived hydroxyapatite thin films for a new generation of metallic implants", A.C. Popescu, P.E. Florian, G.E. Stan, G. Popescu-Pelin, I. Zgura, M. Enculescu, F.N. Oktar, R. Trusca, L.E. Sima, A. Roseanu, L. Duta, Applied Surface Science 439 (2018) 724-735

2017

- "Control of Porosity and Spatter in Laser Welding of Thick AlMg5 Parts Using High-Speed Imaging and Optical Microscopy", A. C. Popescu, C. Delval, M. Leparoux, Metals 7(11) (2017) 452
- "An Experimental Study on Nano-Carbon Films as an Anti-Wear Protection for Drilling Tools", C. Popescu, D. Cristea, B. Bita, R. Cristescu, D. Craciun, G. D. Chioibasu, C. Luculescu, I. Paun, L. Duta, A. C. Popescu, Coatings 7(12) (2017) 228
- "Comparative physical, chemical and biological assessment of simple and titanium-doped ovine dentine-derived hydroxyapatite coatings fabricated by pulsed laser deposition", L.Duta, N.Mihailescu, A.C.Popescu, C.R.Luculescu, I.N.Mihailescu, G. Çetin, O. Gunduz, F.N.Oktar, A.C.Popa, A.Kuncser, C.Besleaga, G.E.Stan, Applied Surface Science 413 (2017) 129-139

2016

- "Fabrication of periodical surface structures by picosecond laser irradiation of carbon thin films: transformation of amorphous carbon in nanographite", C. Popescu, G. Dorcioman, B. Bita, C. Besleaga, I. Zgura, C. Himcinschi, A.C. Popescu, Applied Surface Science 390 (2016) 236-243
- "Investigation and in situ removal of spatter generated during laser ablation of aluminium composites", A.C. Popescu, C. Delval, S. Shadman, M. Leparoux, Applied Surface Science 378 (2016) 102-113
- "Thickness influence on in vitro biocompatibility of Titanium Nitride thin films synthesized by Pulsed Laser Deposition", L. Duta, G. E. Stan, A. C. Popa, M. A. Husanu, S. Moga, M. Socol, I. Zgura, F. Miculescu, I. Urzica, A. C. Popescu, I. N. Mihailescu, Materials 9 (38) (2016) 1–19

2015

- "The role of ambient gas and pressure on the structuring of hard diamond-like carbon films synthesized by Pulsed Laser Deposition", A. C. Popescu, G. E. Stan, L. Duta, C. Nita, C. Popescu, V.-A. Surdu, M.-A. Husanu, B. Bita, R. Ghisleni, C. Himcinschi, V. Craciun, Materials 8 (6) (2015) 3284-3305

2014

- "Nitrogen-doped and gold-loaded TiO2 photocatalysts synthesized by sequential reactive pulsed laser deposition", L. Duta, C. Popescu, A. Popescu, M. Motoc, C. Logofatu, A. Enesca, A. Duta, E. Gyorgy, Applied Physics A: Materials Science and Processing 117 (1) (2014) 1–5
- "Structure and enzymatic activity of laser immobilized Ribonuclease A", C. Popescu, A. C. Popescu, I. Iordache, M. Motoc, D. Pojoga, A. Simon-Gruita, N. Constantin, G. Duta Cornescu, E. Gyorgy, Structure and enzymatic activity of laser immobilized Ribonuclease A, Journal of Materials Science 49 (12) (2014) 4371-4378

2013

- "Functionalized porphyrin conjugate thin films deposited by matrix assisted pulsed laser evaporation", S. Iordache, R. Cristescu, A.C. Popescu, C.E Popescu, G. Dorcioman, I.N. Mihailescu, A.A. Ciucu, A. Balan, I. Stamatin, E. Fagadar-Cosma, and D.B. Chrisey, Applied Surface Science 278 (2013) 207–210
- "Influence of a hydrophobin underlayer on the structuring and antimicrobial properties of ZnO films", A. C. Popescu, G. E. Stan, L. Duta, G. Dorcioman, O. Iordache, I. Dumitrescu, I. Pasuk, I. N. Mihailescu, J Mater Sci 48 (23) (2013) 8329-8336
- "Multi-layer haemocompatible diamond-like carbon coatings obtained by combined radio frequency plasma enhanced chemical vapor deposition and magnetron sputtering",A. C. Popa, G. E. Stan, M. A. Husanu, I. Pasuk, I. D. Popescu, A. C. Popescu, I. N. Mihailescu, J Mater Sci: Mater Med 24(12) (2013) 2695-707
- "Nanoprofiles evaluation of ZnO thin films by an evanescent light method", N. Mirchin, A. Peled, L Duta, A. C. Popescu, G. Dorcioman and I. N. Mihailescu, Microscopy Research and Technique 76(10) (2013) 992-996

2012

- "Measuring Nanolayer Profiles of Various Materials by Evanescent Light Technique", N. Mirchin, B. Apter, I. Lapsker, V. Fogel, U. Gorodetsky, S. A. Popescu, A. Peled, G. Popescu-Pelin, G. Dorcioman, L. Duta, A. Popescu, I. N. Mihailescu, Journal of Nanoscience and Nanotechnology 12 (3) (2012) 2668–2671
- "Structural investigations on electrodes - electrolytes systems for intermediate temperature solid oxide fuel cell applications", L. Duta, G. Dorcioman, A. C. Popescu, I. N. Mihailescu, P. Nita, I. Mercioniu, A. Birsan, I. Bibicu, S. Constantinescu, N. Popescu–Pogrion, Optoelectronics and Advanced Materials – Rapid Communications 6 (11-12) (2012) 1073-1080

2011

- "MAPLE deposition of Mn(III) metalloporphyrin thin films: Structural, topographical and electrochemical investigations", R. Cristescu, C. Popescu, A.C. Popescu, S. Grigorescu, I.N. Mihailescu, A.A. Ciucu, S. Iordache, A. Andronie, I. Stamatin, E. Fagadar-Cosma, D.B. Chrisey , Applied Surface Science 257 (2011) 5293–5297
- "Radical modification of the wetting behavior of textiles coated with ZnO thin films and nanoparticles when changing the ambient pressure in the pulsed laser deposition process", A.C. Popescu, L. Duta, G. Dorcioman, I.N. Mihailescu, G.E. Stan, I. Pasuk, I. Zgura, T. Beica, I. Enculescu, A. Ianculescu, I. Dumitrescu, Journal of Applied Physics 110 (2011) 064321
- "Analysis of indium zinc oxide thin films by laser-induced breakdown spectroscopy", A. C. Popescu, S. Beldjilali,G. Socol, V. Craciun, I. N. Mihailescu, J. Hermann, Journal of Applied Physics 110 (2011) 083116
- "Study of Polyethylene Nanolayers by Evanescent Light Microscopy", S. A Popescu, B. Apter, N. Mirchin, U. Gorodetsky, I. Lapsker, A. Peled, L. Duta, G. Dorcioman, A. Popescu, I. N. Mihailescu, Applied Physics A 104 (3) (2011) 997-1002

2010

- "Double layered nanostructured composite coatings with bioactive silicate glass and polymethylmetacrylate for biomimetic implant applications", L. Floroian, F. Sima, M. Florescu, M. Badea, A.C. Popescu, N. Serban, I.N. Mihailescu, Journal of Electroanalytical Chemistry 648 (2010) 111-118
- "Morphology of polyethylene nanolayers: a study by evanescent light microscopy", I. Lapsker, N. Mirchin, U. Gorodetsky, S. A. Popescu, A. Peled, L. Duta, G. Dorcioman, A. C. Popescu, I. N. Mihailescu, Journal of Materials Science 45(23) (2010) 6332-6338
- "Estimation of polyethylene nanothin layer morphology by differential evanescent light intensity imaging", N. Mirchin, M. Gankin, U. Gorodetsky, S. A. Popescu, I. Lapsker, A. Peled, L. Duta, G. Dorcioman, A. Popescu, I. N. Mihailescu , Journal of Nanophotonics 4 (2010) 041760

- "Functional Porphyrin Thin Films Deposited by Matrix Assisted Pulsed Laser Evaporation", R. Cristescu, C. Popescu, A.C. Popescu, I.N. Mihailescu, A.A. Ciucu, A. Andronie, S. Iordache, I. Stamatin, E. Fagadar-Cosma, D.B. Chrisey, Materials Science and Engineering B 169 (2010) 106–110.
- "On the bioactivity of adherent bioglass thin films synthesized by magnetron sputtering techniques", G.E. Stan, A.C. Popescu, I.N. Mihailescu, D.A. Marcov, R.C. Mustata, L.E. Sima, S.M. Petrescu, A. Ianculescu, R. Trusca, C.O. Morosanu, Thin Solid Films, 518 (2010) 5955–5964

2009

- "Bioglass thin films for biomimetic implants", C. Berbecaru, H. V. Alexandru, A. Ianculescu, A. Popescu, F. Sima, G. Socol, I. N. Mihailescu, Applied Surface Science 255 (2009) 5476–5479
- "Functional polyethylene glycol derivatives nanostructured thin films synthesized by matrix-assisted pulsed laser evaporation", R. Cristescu, C. Popescu, A. Popescu, S. Grigorescu, I.N. Mihailescu, D. Mihaiescu, S.D. Gittard, R.J. Narayan, T. Buruiana, I. Stamatin, D.B. Chrisey, Applied Surface Science 255 (2009) 9873–9876
- "Biocompatible and bioactive nanostructured glass coatings synthesized by pulsed laser deposition: In vitro biological tests", A.C. Popescu, F. Sima, L. Duta, C. Popescu, I.N. Mihailescu, , D. Capitanu, R. Mustata, L.E. Sima, S.M. Petrescu and D. Janackovic, Applied Surface Science, 255 (2009) 5486–5490
- "Laser Processing of Polyethylene Glycol Derivative and Block Copolymer Thin Films", Rodica Cristescu, Camelia Cojanu, Andrei Popescu, Sorin Grigorescu, Liviu Duta, Oana-Salomeea Ionescu, Dan Mihaiescu, Tinca Buruiana, Adriana Andronie, Ioan Stamatin, Ion N. Mihailescu, Douglas B. Chrisey, Applied Surface Science, 255 (2009) 5605–5610
- "Functionalized Polyvinyl Alcohol Derivatives Thin Films for Controlled Drug Release and Targeting Systems: MAPLE Deposition and Morphological, Chemical and In Vitro Characterization", R. Cristescu, C. Cojanu, A. Popescu, S. Grigorescu, L. Duta, G. Caraene, A. Ionescu, D. Mihaiescu, R. Albulescu, T. Buruiana, A. Andronie, I. Stamatin, I. N. Mihailescu, D. B. Chrisey, Applied Surface Science 255 (2009) 5600–5604
- "Bioglass –polymer thin coatings obtained by MAPLE for a new generation of implants", F. Sima, C. Ristoscu, A. Popescu, I. N. Mihailescu, T. Kononenko, S. Simon, T. Radu, O. Ponta, R. Mustata, L. E. Sima, S. M. Petrescu, Journal of Optoelectronics and Advanced Materials, 11(9) (2009) 1170 – 1174

2008

- "Nanostructured bioglass thin films synthesized by pulsed laser deposition: CSLM, FTIR investigations and in vitro biotests", L. Floroian, B. Savu, G. Stanciu, A. C. Popescu, F. Sima, I.N. Mihailescu, R. Mustata, L.E.Sima, S.M. Petrescu, D. Tanaskovic, Dj. Janackovic, Applied Surface Science 255 (5) (2008) 3056-3062

2007

- "Nanocrystalline Er:YAG thin films prepared by pulsed laser deposition: an electron microscopy study", D. Stanoi, A. Popescu, C. Ghica, G. Socol, E. Axente, C. Ristoscu,

I. N. Mihailescu, A. Stefan, S. Georgescu, Applied Surface Science 253 (2007) 8268–8272

- "Synthesis of functionally graded bioactive glass - apatite multistructures on Ti substrates by pulsed laser deposition", D. Tanaskovic, B. Jokic, G. Socol, A. Popescu, I. Mihailescu, R. Petrovic, Dj. Janackovic, Applied Surface Science 254 (4) (2007) 1279-1282
- "Enhanced gas sensing of Au nanocluster –doped or –coated zinc oxide thin films", G. Socol, E. Axente, C. Ristoscu, F. Sima, A. Popescu, N. Stefan, L. Escoubas, J. Ferreira, S. Bakalova, A. Szekeres, I. N. Mihailescu, Journal of Applied Physics, 102 (2007) 083103
- "Processing of Poly(1,3-bis-(p-Carboxyphenoxy Propane)- co-(Sebacic Anhydride)20 : 80 (P(CPP : SA)20 : 80) by Matrix-Assisted Pulsed Laser Evaporation for Drug Delivery Systems", R. Cristescu, C. Cojanu, A. Popescu, S. Grigorescu, C. Nastase, F. Nastase, A Doraiswamy, R.J. Narayan, I. Stamatin, I.N. Mihailescu, D.B. Chrisey, Applied Surface Science 254 (2007) 1169–1173
- "Synthesis of calcium phosphate thin layers of increased biological activity by chemical growth in simulated body fluids", J. Neamtu, G.E. Stan, C. Morosanu, C. Ducu, A. Popescu, I. N. Mihailescu, Journal of Optoelectronics and Advanced Materials 9 (12) (2007) 3821 - 3826

Capitole de carte

- "Laser Ablation Applied for Synthesis of Thin Films: Insights into Laser Deposition Methods", C. Popescu, G. Dorcioman, A. C. Popescu, chapter 1 in the book "Applications of Laser Ablation - Thin Film Deposition, Nanomaterial Synthesis and Surface Modification" C. Popescu, G. Dorcioman, A. C. Popescu, edited by Dongfang Yang, pp. 3-32, InTech, ISBN 978-953-51-2812-0 (2016)
- "Wettability of nanostructured surfaces", L. Duta, A. C. Popescu, I. Zgura, N. Preda, and I. N. Mihailescu, Chapter 8 in "Wetting and Wettability", Dr. Mahmood Aliofkhazraei (Ed.), InTech, ISBN 978-953-51-2215-9 (2015)
- "Deposition and surface modification of thin solid structures by high intensity pulsed laser irradiation" Andrei C. Popescu, Magdalena Ulmeanu, Carmen Ristoscu, Ion N. Mihailescu, Chapter 12 in "Laser surface engineering: Processes and applications" edited by: Jonathan Lawrence and David Waugh, Woodhead Publishing Series in Electronic and Optical Materials, pp. 287 – 313, Woodhead Publishing Ltd, ISBN 978-1782420743 (2015)
- "ZnO thin films deposited on textile material substrates for biomedical applications", L. Duta, A.C. Popescu, G. Dorcioman, I. N. Mihailescu, G.E. Stan, I. Zgura, I. Enculescu, I. Dumitrescu, chapter 20 in A. Vaseashta, E. Braman, P. Susmann (eds.) "Technological innovations in sensing and detection of chemical, biological, radiological, nuclear threats and ecological terrorism", NATO science for peace and security series A: Chemistry and biology, part 4, pp. 207-210, doi: 10.1007/978-94-007-2488-4_20 (2012)
- " Pulsed Laser Processing of Functionalized Polysaccharides for Controlled Release Drug Delivery Systems", R. Cristescu, C. Popescu, A.C. Popescu, G. Socol , I. Mihailescu, G. Caraene, R. Albulescu, T. Buruiana, and D. Chrisey, chapter 25 in A. Vaseashta, E. Braman, P. Susmann (eds.) "Technological innovations in sensing and detection of chemical, biological, radiological, nuclear threats and ecological

terrorism", NATO science for peace and security series A: Chemistry and biology, part 4, pp. 231-236, doi: 10.1007/978-94-007-2488-4_20 (2012)

- "Polymer-Bioglass Composite Coatings: A Promising Alternative For Advanced Biomedical Implants", Laura Floroian, Andrei Popescu, Natalia Serban and Ion Mihailescu, chapter 20 in "Metal, Ceramic and Polymeric Composites for Various Uses" edited by John Cuppoletti, pp. 393- 420, Intech, ISBN 978-953-307-353-8 (2011)