

LISTA DE LUCRĂRI

Cele mai importante lucrări

1. **Izabela-Cristina Stancu** - Gelatin hydrogels with PAMAM nanostructured surface and high density surface-localized amino groups, **REACTIVE AND FUNCTIONAL POLYMERS**, ISSN: 1381-5148, 70 (5), 314, 2010, WOS:000277557100008, DOI: 10.1016/j.reactfunctpolym.2010.02.005 IF2018 3,074 (prim autor)
2. **Izabela-Cristina Stancu**, Diana Maria Dragusin, Eugeniu Vasile, Roxana Trusca, Iulian Antoniac, Dan Sorin Vasilescu- Porous calcium alginate-gelatin interpenetrated matrix and its biomineralization potential, **JOURNAL OF MATERIALS SCIENCE: MATERIALS IN MEDICINE**, ISSN: 0957-4530, 22 (3), 451, 2011, WOS:000289302600003, DOI: 10.1007/s10856-011-4233-7 IF2018 2,467 (prim autor)
3. Silvia Bubenikova, **Izabela-Cristina Stancu**, Lucia Kalinovska, Etienne Schacht, Evi Lippens, Heidi Declercq, Maria Cornelissen, Matteo Santin, Muriel Amblard, Jean Martinez, Chemoselective cross-linking of alginate with thiol-terminated peptides for tissue engineering applications, **CARBOHYDRATE POLYMERS**, ISSN: 0144-8617, 88 (4), 1239, 2012, DOI: 10.1016/j.carbpol.2012.01.089, EID 2-s2.0-84859421108, WOS:000302979700017, IF2018 6,044 (autor corespondență)
4. Vasile Eugeniu, Serafim Andrada, Dragusin, Diana-Maria, Petrea Celina, Iovu Horia, **Stancu Izabela-Cristina** Apatite formation on active nanostructured coating based on functionalized gold nanoparticles, **JOURNAL OF NANOPARTICLES RESEARCH**, ISSN: 1388-0764, 14 (6), Article Number: 918, 2012, WOS:000305328900033 IF2018 2,009 (autor corespondență)
5. Diana-Maria Dragusin, Sandra Van Vlierberghe, Peter Dubruel, Manuel Dierick, Luc Van Hoorebeke, Heidi Declercq, Maria Cornelissen, **Izabela-Cristina Stancu**, Novel gelatin-PHEMA porous scaffolds for tissue engineering applications, **SOFT MATTER**, ISSN: 1744-683X, 8 (37), 9589, 2012, WOS:000308095700013, DOI: 10.1039/c2sm25536g IF2018 3,399 (autor corespondență)
6. **Izabela-Cristina Stancu**, Adriana Lungu, Diana-Maria Dragusin, Eugeniu Vasile, Celina Damian, Iovu Horia - Porous Gelatin-Alginate-Polyacrylamide Scaffolds with Interpenetrating Network Structure: Synthesis and Characterization, **SOFT MATERIALS**, ISSN: 1539-445X, 11(4), 384-393, 2013, DOI: 10.1080/1539445X.2011.642091, WOS:000326713300002 IF2018 0,973 (prim autor)
7. Andrada Serafim, Catalin Tucureanu, Daniela-Geta Petre, Diana-Maria Dragusin, Aurora Salageanu, Sandra Van Vlierberghe, Peter Dubruel, **Izabela-Cristina Stancu** - One-pot synthesis of superabsorbent hybrid hydrogels based on methacrylamide gelatin and polyacrylamide. Effortless control of hydrogel properties through composition design, **NEW JOURNAL OF CHEMISTRY**, ISSN: 1144-0546, 38 (7), 3112-3126, 2014, DOI: 10.1039/c4nj00161c, WOS:000338117900053 IF2018 3,069 (autor corespondență)
8. Andrada Serafim, Sergiu Cecoltan, Adriana Lungu, Eugeniu Vasile, Horia Iovu, **Izabela-Cristina Stancu** - Electrospun fish gelatin fibrous scaffolds with improved bio-interactions due to carboxylated nanodiamond loading, **RSC ADVANCES**, ISSN: 2046-2069, 5 (116), 95467, 2015, DOI: 10.1039/c5ra14361f, WOS:000364907300009, IF2018 3,049 (autor corespondență)

9. Cecoltan, Sergiu; **Stancu, Izabela-Cristina**; Dragusin, Diana Maria; Serafim, Andrada; Lungu, Adriana; Tucureanu, Catalin; Caras, Iuliana; Tofan, Vlad Constantin; Salageanu, Aurora; Vasile, Eugeniu; Mallet, Romain; Chappard, Daniel; Coman, Cristin; Istodorescu, Mircea; Iovu, Horia, Nanocomposite particles with improved microstructure for 3D culture systems and bone regeneration, **JOURNAL OF MATERIALS SCIENCE-MATERIALS IN MEDICINE**, 28(10), Article Number: 153, 2017, DOI: 10.1007/s10856-017-5966-8, WOS:000411111500009, IF2018 2,467 (autor corespondență)
10. Eugeniu Vasile, Andrada Serafim, Daniela Petre, Diana Elena Giol, Peter Dubruel, Horia Iovu, **Izabela-Cristina Stancu** - Direct Synthesis and Morphological Characterization of Gold-Dendrimer Nanocomposites Prepared Using PAMAM Succinamic Acid Dendrimers: Preliminary Study of the Calcification Potential, **THE SCIENTIFIC WORLD JOURNAL**, ISSN: 1537-744X, Article Number: 103462, 2014, WOS:000330882600001, IF2018 1,219 (autor corespondență)

Alte lucrări relevante pentru domeniul tezei de abilitare

Capitole de cărți

1. **Stancu, I.C.**, Lungu A., Iovu H. *Hydrogels for bone regeneration* capitol in cartea **Biomaterials for Bone Regeneration: Novel Techniques and Applications**, Editor: Dubruel P., Van Vlierberghe S., Editura Elsevier Ltd, 2014, Croatia, ISBN 978-085709810-8;978-085709804-7 doi:10.1533/9780857098104.1.62 (prim autor și autor de corespondență)
2. **Stancu, I.C.**, Lungu A., Albu M.G., Iovu H. *Concept and Design of Polymer Scaffolds with Controlled Biodegradability and Porosity for Tissue Engineering Applications* capitolul 2 în “**Advanced Biocompatible Structures for Prospective Bioengineering: Concepts and Strategies**”, coordonatori Prof. Dr. Marieta Costache si Acad. Dr. Maya Simionescu, Editura Academiei Romane, ISBN 978-973-27-2317-3 (prim autor)
3. **Stancu, I.C.** *SPR Imaging label-free control of biomineral nucleation!?* capitol in cartea **Intelligent and Biosensors**, Editor: Vernon S. Somerset, Editura IN TECH, 2010, Croatia, ISBN 978-953-7619-58-9 (unic autor)
4. **IC Stancu**, D Chappard, *Developments in Hydrogel - based Scaffolds and Bioceramics for Bone Regeneration* în cartea **Bioceramics and Biocomposites: From Research to Clinical Practice**, Editor Iulian Antoniac, pg 39-56 Identifiers: LCCN 2018056452 (print) | LCCN 2018058843 (ebook) | ISBN 9781119372134 (AdobePDF) | ISBN 9781119372141 (ePub) | ISBN 9781119049340 (hardcover : alk. paper) 2019, John Wiley & Sons (prim autor)
5. FA Jerca, VV Jerca, **IC Stancu**, Development and Characterization of Photoresponsive Polymers in **Polymer and Photonic Materials Towards Biomedical Breakthroughs**, editori Jasper Van HoorickHeidi OttevaereHugo ThienpontPeter DubruelSandra Van Vlierberghe, p 3-47, Springer
6. **IC Stancu**, D Chappard, *Developments in Hydrogel - based Scaffolds and Bioceramics for Bone Regeneration* in cartea **Bioceramics and Biocomposites: From Research to Clinical Practice**, editor I. Antoniac, 2019, 39-56, ISBN: 978-1-119-04934-0 John Wiley & Sons, Inc.

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Reviste de specialitate de circulație internațională recunoscute (cotate / indexate ISI Thomson Reuters, sau indexate in alte Baze de Date Internationale - BDI specifice domeniului, care fac un proces de selectie a revistelor pe baza unor criterii de performanta) – dintre care 48 ISI, cu 25 ca autor principal

1. **Izabela-Cristina Stancu**, Robert Filmon, Corneliu Cincu, Bogdan Marculescu, Catalin Zaharia, Yves Tourmen, Michel Felix Basle, Daniel Chappard - Synthesis of methacryloyloxyethyl phosphate copolymers and in vitro calcification capacity, **BIOMATERIALS**, ISSN: 0142-9612, 25

- (2), 205, WOS:000253619900005, DOI: 10.1016/S0142-9612(03)00485-X, Article, IF 2018 10,273 (prim autor)
2. **Izabela-Cristina Stancu**, Robert Filmon, Florence Grizon, Catalin Zaharia, Corneliu Cincu, Michel Felix Basle, Daniel Chappard - The in vivo calcification capacity of a copolymer, based on methacryloyloxyethyl phosphate, does not favor osteoconduction, JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART A, ISSN: 0021-9304, 69A (3), 584, 2004, WOS:000221418400024, EID 2-s2.0-2442650303, Article, IF 2018 3,221 (prim autor)
 3. Adriana Lungu, **Izabela-Cristina Stancu**, Edina Rusen, Bogdan Marculescu, Horia Iovu - Studies concerning the chemical immobilization of dendrimers on macroporous polymer matrix, Journal of Optoelectronics and Advanced Materials, ISSN: 1454-4164, 9 (11), 3454, 2007, WOS:000251435200035, IF 0,588 (autor corespondență)
 4. Fernandez-Gonzalez, A; **Stancu, IC**; Butac, LM ; Salzer, R, Noise reduction in surface plasmon resonance images, OPTOELECTRONICS AND ADVANCED MATERIALS-RAPID COMMUNICATIONS 1(9) 452-456 2007, WOS:000253725200007, IF 2018 0,452 (autor corespondență)
 5. **Izabela-Cristina Stancu**, Alfonso Fernández-González, Livia Maria Butac, Reiner Salzer - Surface plasmon resonance imaging sensors based on mucin - antimucin interaction, JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS, ISSN: 1454-4164, 9 (9), 2696, WOS:000249903600006, IF 2018 0,588 (prim autor)
 6. **Izabela-Cristina Stancu**, Alfonso Fernández-González, Reiner Salzer - SPR imaging antimucin-mucin bioaffinity based biosensor as label-free tool for early cancer diagnosis. Design and detection principle, Journal of Optoelectronics and Advanced Materials, ISSN: 1454-4164, 9 (6), 1883, 2007, WOS:000247153900062 IF 2018 0,588 (prim autor)
 7. **Izabela-Cristina Stancu**, Pierre Layrolle, Helene Libouban, Robert Filmon, G Legeay, Corneliu Cincu, Michel Felix Basle, Daniel Chappard - Preparation of macroporous poly (2-hydroxyethyl) methacrylate with interconnected porosity, Journal of Optoelectronics and Advanced Materials, ISSN: 1454-4164, 9 (7), 2125, 2007, WOS:000248583100034 IF 2018 0,588 (prim autor)
 8. Adriana Lungu, Edina Rusen, Livia Maria Butac, **Izabela-Cristina Stancu**, Epoxy-mediated immobilization of PAMAM dendrimers on methacrylic hydrogels, DIGEST JOURNAL OF NANOMATERIALS AND BIOSTRUCTURES, ISSN: 1842-3582, 4 (1), 97, 2009, WOS:000267327200013 IF 0,638 (autor corespondență)
 9. **Izabela-Cristina Stancu**, Adriana Lungu, Edina Rusen, Alexandra Mocanu, Petrisor Zamora Iordache, Diana Maria Dragusin, Cosmin Cotrut, Eugeniu Vasile, Horia Iovu -Multifunctional Pamam-Surface Nanostructured Particles Organized in Multimeric Clusters. Potential Smart Delivery Vehicles of Bioactive Species Through a High Selective Amine-Thiol Bioconjugation Strategy, DIGEST JOURNAL OF NANOMATERIALS AND BIOSTRUCTURES, ISSN: 1842-3582, 5 (4), 1077, 2010, WOS:000286064000008 IF 2018 0,638 (prim autor)
 10. **Izabela-Cristina Stancu** - Gelatin hydrogels with PAMAM nanostructured surface and high density surface-localized amino groups, REACTIVE AND FUNCTIONAL POLYMERS, ISSN: 1381-5148, 70 (5), 314, 2010, WOS:000277557100008, DOI: 10.1016/j.reactfunctpolym.2010.02.005 IF2018 3,074 (prim autor)
 11. Teodora Zecheru, Traian Rotariu, Edina Rusen, Bogdan Marculescu, Florin Miculescu, Laura Alexandrescu, Iulian Antoniac, **Izabela-Cristina 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, ISSN: 0957-4530 21 (10), 2793, 2010, WOS:000283371200009, DOI: 10.1007/s10856-010-4129-y IF2018 2,467 (autor corespondență)
 12. **Izabela-Cristina Stancu**, Diana Maria Dragusin, Eugeniu Vasile, Roxana Trusca, Iulian Antoniac, Dan Sorin Vasilescu- Porous calcium alginate-gelatin interpenetrated matrix and its

- biomineralization potential, JOURNAL OF MATERIALS SCIENCE: MATERIALS IN MEDICINE, ISSN: 0957-4530, 22 (3), 451, 2011, WOS:000289302600003, DOI: 10.1007/s10856-011-4233-7 IF2018 2,467 (prim autor)
13. Diana Maria Dragusin, Diana Elena Giol, Andrada Serafim, Eugeniu Vasile, Teodora Zecheru, **Izabela-Cristina Stancu**- Casein - PHEMA: In vitro formation of nanometric Ca-P Nuclei, DIGEST JOURNAL OF NANOMATERIALS AND BIOSTRUCTURES, ISSN: 1842-3582, 6 (4), 1909, 2011, WOS:000300568100050 IF2018 0,638 (autor corespondență)
 14. Silvia Bubenikova, **Izabela-Cristina Stancu**, Lucia Kalinovska, Etienne Schacht, Evi Lippens, Heidi Declercq, Maria Cornelissen, Matteo Santin, Muriel Amblard, Jean Martinez, Chemoselective cross-linking of alginate with thiol-terminated peptides for tissue engineering applications, CARBOHYDRATE POLYMERS, ISSN: 0144-8617, 88 (4), 1239, 2012, DOI: 10.1016/j.carbpol.2012.01.089, EID 2-s2.0-84859421108, WOS:000302979700017, IF2018 6,044 (autor corespondență)
 15. Vasile Eugeniu, Serafim Andrada, Dragusin, Diana-Maria, Petrea Celina, Iovu Horia, **Stancu Izabela-Cristina** Apatite formation on active nanostructured coating based on functionalized gold nanoparticles, JOURNAL OF NANOPARTICLES RESEARCH, ISSN: 1388-0764, 14 (6), Article Number: 918, 2012, WOS:000305328900033 IF2018 2,009 (autor corespondență)
 16. Diana-Maria Dragusin, Sandra Van Vlierberghe, Peter Dubruel, Manuel Dierick, Luc Van Hoorebeke, Heidi Declercq, Maria Cornelissen, **Izabela-Cristina Stancu**, Novel gelatin-PHEMA porous scaffolds for tissue engineering applications, SOFT MATTER, ISSN: 1744-683X, 8 (37), 9589, 2012, WOS:000308095700013, DOI: 10.1039/c2sm25536g IF2018 3,399 (autor corespondență)
 17. **Izabela-Cristina Stancu**, Adriana Lungu, Diana-Maria Dragusin, Eugeniu Vasile, Celina Damian, Iovu Horia - Porous Gelatin-Alginate-Polyacrylamide Scaffolds with Interpenetrating Network Structure: Synthesis and Characterization, SOFT MATERIALS, ISSN: 1539-445X, 11(4), 384-393, 2013, DOI: 10.1080/1539445X.2011.642091, WOS:000326713300002 IF2018 0,973 (prim autor)
 18. Andrada Serafim, Eugeniu Vasile, Horia Iovu, **Izabela-Cristina Stancu** - Self-assembled gold-dendrimer composite nanoparticles as surface nanostructuring features, DIGEST JOURNAL OF NANOMATERIALS AND BIOSTRUCTURES, ISSN: 1842-3582, 8 (2), 613-620, 2013, WOS:000322737500014 IF2018 0,638 (autor corespondență)
 19. Andrada Serafim, Catalin Tucureanu, Daniela-Geta Petre, Diana-Maria Dragusin, Aurora Salageanu, Sandra Van Vlierberghe, Peter Dubruel, **Izabela-Cristina Stancu** - One-pot synthesis of superabsorbent hybrid hydrogels based on methacrylamide gelatin and polyacrylamide. Effortless control of hydrogel properties through composition design, NEW JOURNAL OF CHEMISTRY, ISSN: 1144-0546, 38 (7), 3112-3126, 2014, DOI: 10.1039/c4nj00161c, WOS:000338117900053 IF2018 3,069 (autor corespondență)
 20. Andrada Serafim, Romain Mallet, Florence Pascaretti-Grizon, **Izabela-Cristina Stancu**, Daniel Chappard - Osteoblast-Like Cell Behavior on Porous Scaffolds Based on Poly(styrene) Fibers, BIOMED RESEARCH INTERNATIONAL, ISSN:2314-6133, Article Number: 609319, 2014, DOI: 10.1155/2014/609319, WOS:000338084700001 IF2018 2,197 (autor corespondență)
 21. Eugeniu Vasile, Andrada Serafim, Daniela Petre, Diana Elena Giol, Peter Dubruel, Horia Iovu, **Izabela-Cristina Stancu** - Direct Synthesis and Morphological Characterization of Gold-Dendrimer Nanocomposites Prepared Using PAMAM Succinamic Acid Dendrimers: Preliminary Study of the Calcification Potential, THE SCIENTIFIC WORLD JOURNAL, ISSN: 1537-744X, Article Number: 103462, 2014, WOS:000330882600001, IF2018 1,219 (autor corespondență)
 22. Andrada Serafim, Sergiu Cecoltan, Adriana Lungu, Eugeniu Vasile, Horia Iovu, **Izabela-Cristina Stancu** - Electrospun fish gelatin fibrous scaffolds with improved bio-interactions due to carboxylated nanodiamond loading, RSC ADVANCES, ISSN: 2046-2069, 5 (116), 95467, 2015, DOI: 10.1039/c5ra14361f, WOS:000364907300009, IF2018 3,049 (autor corespondență)

23. Cecoltan, Sergiu; **Stancu, Izabela-Cristina**; Dragusin, Diana Maria; Serafim, Andrada; Lungu, Adriana; Tucureanu, Catalin; Caras, Iuliana; Tofan, Vlad Constantin; Salageanu, Aurora; Vasile, Eugeniu; Mallet, Romain; Chappard, Daniel; Coman, Cristin; Istodorescu, Mircea; Iovu, Horia, Nanocomposite particles with improved microstructure for 3D culture systems and bone regeneration, *JOURNAL OF MATERIALS SCIENCE-MATERIALS IN MEDICINE*, 28(10), Article Number: 153, 2017, DOI: 10.1007/s10856-017-5966-8, WOS:000411111500009, IF2018 2,467 (autor corespondență)
24. Dragusin, Diana Maria; Curti, Filis; Cecoltan, Sergiu; Sarghiuta, Daniela; Butac, Livia Maria; Vasile, Eugeniu; Marinescu, Rodica; **Stancu, Izabela Cristina**, Biocomposites Based on Biogenous Mineral for Inducing Biomimetic Mineralization, *MATERIALE PLASTICE*, 54(2): 207-213, 2017, WOS:000408702100003, IF2018 1,393 (autor corespondență)
25. Serafim, Andrada; Olaret, Elena; Cecoltan, Sergiu; Butac, Livia Maria; Balanuca, Brindusa; Vasile, Eugeniu; Ghica, Mihaela; **Stancu, Izabela Cristina**, Bicomponent Hydrogels Based on Methacryloyl Derivatives of Gelatin and Mucin with Potential Wound Dressing Applications, *MATERIALE PLASTICE*, 55(1): 68-74, 2018 WOS:000444129500015, IF2018 1,393 (autor corespondență)
26. Guillaume Mabillean, **Izabela-Cristina Stancu**, T Honore, G Legeay, Corneliu Cincu, Michel Felix Basle, Daniel Chappard- Effects of the length of crosslink chain on poly(2-hydroxyethyl methacrylate) (pHEMA) swelling and biomechanical properties, *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH - PART A*, 77 (1), 35, 2006, WOS:000235945000005 IF2018 3,221 (co-autor)
27. Guillaume Mabillean, Eric Aguado, **Izabela-Cristina Stancu**, Corneliu Cincu, Michel Felix Basle, Daniel Chappard- Effects of FGF-2 release from a hydrogel polymer on bone mass and microarchitecture, *BIOMATERIALS*, 29 (11), 1593, WOS:000253619900005, EID 2-s2.0-38749123989 IF2018 10,273 (co-autor)
28. Alexandra Mocanu, Bogdan Marculescu, Raluca Somoghi, Florin Miculescu, Cristian Boscornea, **Izabela-Cristina Stancu**- Fluorescence enhancement for the complex PAMAM-BSA in the presence of photonic crystal heterostructures, *COLLOIDS AND SURFACES A-PHYSICOCHEMICAL AND ENGINEERING ASPECTS*, 392 (1), 288, 2011, WOS:000298899300038 IF2018 3,131 (co-autor)
29. Adriana Lungu, Madalina G Albu, Nicoleta Florea, **Izabela-Cristina Stancu**, Eugeniu Vasile, Horia Iovu- The influence of glycosaminoglycan type on the collagen-glycosaminoglycan porous scaffolds, *DIGEST JOURNAL OF NANOMATERIALS AND BIOSTRUCTURES*, 6 (4), 1867, 2011, WOS:000300568100046 IF2018 0,638 (co-autor)
30. Edina Rusen, Bogdan Marculescu, **Izabela-Cristina Stancu**, Ana Maria Albu, C. Grigoras, Dan Sorin Vasilescu- Grafting N-vinyl-carbazole on alternating copolymers obtained from dicyclopentadiene, *OPTOELECTRONICS AND ADVANCED MATERIALS, RAPID COMMUNICATIONS*, 3 (3), 249, 2009, WOS:000265405200020 IF2018 0,452 (co-autor)
31. Florica Adriana Nicolescu, Valentin Victor Jerca, **Izabela-Cristina Stancu**, Dan Sorin Vasilescu, Dumitru Mircea Vuluga- New organic-inorganic hybrids with azo-dye content, *DESIGNED MONOMERS AND POLYMERS*, 13 (5), 437, 2010, WOS:000282736600005 IF2018 1,528 co-autor
32. Edina Rusen, Bogdan Marculescu, **Izabela-Cristina Stancu**, C. Grigoras, Dan Sorin Vasilescu- Chemical transformations on copolymers obtained from dicyclopentadiene, *MATERIALE PLASTICE*, 45 (4), 409, 2008, WOS:000262600800020 IF 1.393 co-autor
33. Diana-Maria Dragusin, Andrada Serafim, Teodora Zecheru, **Izabela-Cristina Stancu**, Eugeniu Vasile, Ciupina- Casein - nanosized nucleator for in vitro mineralization, *OPTOELECTRONICS AND ADVANCED MATERIALS-RAPID COMMUNICATIONS*, ISSN: 2065-3824, 1842-6573, 5 (12), 1320, 2011, WOS:000298850400012 IF2018 0,452 (co-autor)

34. Catalin Zaharia, Mihaela-Ramona Tudora, **Izabela-Cristina Stancu**, Bianca Galateanu, Adriana Lungu, Corneliu Cincu- Characterization and deposition behavior of silk hydrogels soaked in simulated body fluid, *MATERIALS SCIENCE & ENGINEERING C-MATERIALS FOR BIOLOGICAL APPLICATIONS*, 32 (4), 945, WOS:000303299300047 IF2018 4,959 (co-autor)
35. Andrada Serafim, Diana Maria Dragusin, Teodora Zecheru, Peter Dubruel, Daniela Petre, Lucian Toma Ciocan, Eugeniu Vasile, **Izabela-Cristina Stancu**- Gelatin hydrogels: Effect of ethylene oxide based synthetic crosslinking agents on the physico-chemical properties, *DIGEST JOURNAL OF NANOMATERIALS AND BIOSTRUCTURES*, 8 (1), 101, 2012, WOS:000316441200011 IF2018 0,638 (co-autor)
36. D. M. Dragusin, D. E. Giol, E. Vasile, R. Trusca, M. Teodorescu, **I. Stancu**, D. S. Vasilescu, H. Iovu, Influence of physical interactions on the porosity of gelatin-alginate scaffolds, *Optoelectronics and advanced materials – Rapid communications* (2011) 5(4), 459 – 464 WOS:000290774800058 IF2018 0,452 (co-autor)
37. Adriana Lungu, Madalina G. Albu, **Izabela-Cristina Stancu**, Nicoleta M. Florea, Eugeniu Vasile, Iovu Horia- Superporous collagen-sericin scaffolds, *JOURNAL OF APPLIED POLYMER SCIENCE*, 127 (3), 2269, 2013, WOS:000310603100102 IF2018 2,188 (co-autor)
38. Sorina Dinescu, Bianca Galateanu, Eugen Radu, Anca Hermenean, Adriana Lungu, **Izabela-Cristina Stancu**, Dana Jianu, Tudorita Tumber, Marieta Costache- A 3D Porous Gelatin-Alginate-Based-IPN Acts as an Efficient Promoter of Chondrogenesis from Human Adipose-Derived Stem Cells, *STEM CELLS INTERNATIONAL*, Article Number: 252909, 2015, WOS:000355851800001 IF2018 3,902 (co-autor)
39. Daniel Chappard, **Izabela-Cristina Stancu**- Porosity imaged by a vector projection algorithm correlates with fractal dimension measured on 3D models obtained by microCT, *JOURNAL OF MICROSCOPY*, 258 (1), 24, 2015, WOS:000351381000004 IF2018 1,813 (co-autor)
40. Petre, Daniela; Cecoltan, Sergiu; Serafim, Andrada; Lungu, Adriana; Dragusin, Diana Maria; Stan, Eliza Geta; Tucureanu, Catalin; Vasile, Eugeniu; Salageanu, Aurora; Istodorescu, Mircea; Iovu, Horia; **Stancu, Izabela Cristina**, Composite Particles Gel - Alg - Apatite for Bone Tissue Regeneration, *MATERIALE PLASTICE*, 53(2): 269-272, 2016, WOS:000380629300018 IF2018 1,393 (co-autor)
41. Lisa Terranova, Diana Maria Dragusin, Romain Mallet, Eugeniu Vasile, **Izabela-Cristina Stancu**, Catherine Behets, Daniel Chappard Repair of calvarial bone defects in mice using electrospun polystyrene scaffolds combined with β -TCP or gold nanoparticles, *MICRON*, 93, 29-37, 2017, DOI: 10.1016/j.micron.2016.11.001, WOS:000393017000004 IF2018 1,530 (co-autor)
42. Serafim, Andrada; Constantinescu, Mihai Octavian; Iordache, Florinel Tirdea; Vasile, Eugeniu; Lungu, Adriana; Marinescu, Rodica; **Stancu, Izabela Cristina**, Bio-activation of Inert pHEMA Matrices with Phosphate Loaded Cellulose Fibers in Order to Induce Mineralization, *MATERIALE PLASTICE* 54(2): 235-238, 2017, WOS:000408702100008 IF2018 1,393(co-autor)
43. Manolescu, Bogdan Stelian Mastalier; Popescu, Valentin; Petrutescu, Marius Septimiu; Serafim, Andrada; **Stancu, Izabela Cristina**, Evaluations of Implanted Polypropylene Mesh After Surgical Removal Due to Eventration or Mesh Rejection, *MATERIALE PLASTICE*, 54(1), 49-52, 2017 IF2018 1,393 WOS:000400629900011 (co-autor)
44. Jerca, Florica Adriana; Anghelache, Alina Maria; Ghibu, Emilian; Cecoltan, Sergiu; **Stancu, Izabela-Cristina**; Trusca, Roxana; Vasile, Eugeniu; Teodorescu, Mircea; Vuluga, Dumitru Mircea; Hoogenboom, Richard; Jerca, Valentin Victor, Poly(2-isopropenyl-2-oxazoline) Hydrogels for Biomedical Applications, *CHEMISTRY OF MATERIALS*, 30(21): 7938-7949, 2018, DOI: 10.1021/acs.chemmater.8b03545, WOS:000450696100061 IF2018 10,159 (co-autor)
45. Cernencu, Alexandra I.; Lungu, Adriana; **Stancu, Izabela-Cristina**; Serafim, Andrada; Heggset, Ellinor; Syverud, Kristin; Iovu, Horia, Bioinspired 3D printable pectin-nanocellulose ink

formulations, CARBOHYDRATE POLYMERS, 220, 12-21, 2019, DOI: 10.1016/j.carbpol.2019.05.026, WOS:000470825500002 IF2018 6,044 (co-autor)

46. Cernencu, Alexandra; Lungu, Adriana; **Stancu, Izabela Cristina**; Vasile, Eugeniu; Iovu, Horia, Polysaccharide-Based 3d Printing Inks Supplemented With Additives, UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN SERIES B-CHEMISTRY AND MATERIALS SCIENCE, 81(4): 175-186, 2019, WOS:000501994100016 IF- (co-autor)
47. Dziadek, Michal ; Douglas, Timothy E. L.; Dziadek, Kinga; Zagrajczuk, Barbara; Serafim, Andrada; Stancu, Izabela-Cristina; Cholewa-Kowalska, Katarzyna, Novel whey protein isolate-based highly porous scaffolds modified with therapeutic ion-releasing bioactive glasses, MATERIALS LETTERS, 261, Article Number: 127115, DOI: 10.1016/j.matlet.2019.127115, WOS:000506193100081 IF2018 3,019 (co-autor)
48. Gupta, Dhanak; Kocot, Magdalena; Tryba, Anna Maria; Serafim, Andrada; Stancu, Izabela C.; Jaegermann, Zbigniew; Pamula, Elzbieta; Reilly, Gwendolen C.; Douglas, Timothy E. L, Novel naturally derived whey protein isolate and aragonite biocomposite hydrogels have potential for bone regeneration, MATERIALS & DESIGN, 188, (2020) DOI: 10.1016/j.matdes.2019.108408, WOS:000514567900046 IF2018 5,770 (co-autor)
49. Olaret, Elena ; Ghitman, Jana; Iovu, Horia; Serafim, Andrada; Stancu, Izabela-Cristina, Coatings based on mucin-tannic acid assembled multilayers. Influence of pH , POLYMERS FOR ADVANCED TECHNOLOGIES, 31 (4): 645-653, 2020, DOI: 10.1002/pat.4783, WOS:000510603300001 IF2018 2,162 (co-autor)
50. Selaru, Aida; Dragusin, Diana-Maria; Olaret, Elena; Serafim, Andrada; Steinmueller-Nethl, Doris; Vasile, Eugeniu; Iovu, Horia; **Stancu, Izabela-Cristina**; Costache, Marieta; Dinescu, Sorina, Fabrication and Biocompatibility Evaluation of Nanodiamonds-Gelatin Electrospun Materials Designed for Prospective Tissue Regeneration Applications, MATERIALS, 12(8), Article Number: 2933, 2019, DOI: 10.3390/ma12182933, WOS:000489126600092 IF2018 2,972 (co-autor)

Reviste indexate

1. Serafim, A., Dragușin, D.-M., Butac, L.M, Vasilescu, D.S., Dubruel, P., **Stancu, I.-C.** New hydrogels based on gelatin and acrylamide, UPB Scientific Bulletin, Series B: Chemistry and Materials Science 75(2), pp. 3-14, 2013, ISSN 1454-2331
2. Dragusin D.-M., Vasilescu D.S., Van Vlierberghe S., Dubruel P., **Stancu I.-C.** Effect of initiator's concentration on properties of gelatin - Hema hydrogels (2012) UPB Scientific Bulletin, Series B: Chemistry and Materials Science, 74 (4) , pp. 31-46
3. Tudora, M.-R., Zaharia, C., **Stancu, I.-C.**, Vasile E., Trușcă, R., Cincu, C., Natural silk fibroin micro- and nanoparticles with potential uses in drug delivery systems, UPB Scientific Bulletin, Series B: Chemistry and Materials Science 75(1), pp. 43-52
4. Serafim, A., Cecoltan, S., Vasile, E., **Stancu, I.-C.** Polyacrylamide-gelatin hydrogels and mineralized hybrids. Influence of gelatin type, UPB Scientific Bulletin, Series B: Chemistry and Materials Science 77(4), pp. 189-200, 2015, ISSN 1454-2331

Alte publicații citate în Scopus

1. Degeratu, C.N., Mabillean, G., Aguado, E., Mallet, R., Chappard, D., Cincu, C., **Stancu, I.C.**, Polyhydroxyalkanoate (PHBV) fibers obtained by a wet spinning method: Good in vitro cytocompatibility but absence of in vivo biocompatibility when used as a bone graft | [Fibres de polyhydroxyalkanoate (PHBV) obtenues par une méthode de filage humide: bonne cytocompatibilité in vitro mais absence de biocompatibilité in vivo en site osseux], Morphologie 103(341), pp. 94-102, 2019 (co-autor)

Brevete

1. Inventatori: **Stancu IC**, Cecoltan S, Petre DG, Lungu A, Serafim A, Drăgușin DM, Vasile E, Marinescu R, Salageanu A, Țucureanu C., Caraș I., Tofan V.C., Istodorescu M. Titulari: UPB, Institutul National de cercetare Cantacuzino București, Medical Ortovit SRL, Procedeu de obținere a unor substraturi bionanocompozite hidratate pentru creștere celulară și regenerare/modelare tisulară, Brevet nr. 132544 data eliberării 29.05.2020 (prim autor)

Volumele unor manifestări științifice internaționale recunoscute, organizate în țară și străinătate;

1. Cecoltan S., Serafim A., Drăgușin DM, Lungu A., Lagayyo A., Barberis F., **Stancu I.-C.**, *The potential of NDPs-loaded fish gelatin fibers as reinforcing agent for fish gelatin hydrogels*, Key Engineering Materials, 695, 278-283, 2016
International Seminar on Biomaterials and Regenerative Medicine, BIOREMED 2015; Oradea; Romania; 17 September 2015 through 19 September 2015; Code 168419
DOI: 10.4028/www.scientific.net/KEM.695.278 (autor principal)

2. Serafim, A., Petre, D.G., Adriana, L., Cioflan, H.E., **Stancu, I.-C.**
Hybrid hydrogels intended as scaffolds for soft tissue repair
Key Engineering Materials, 638, 54-61, 2014
6th International Conference on Biomaterials, Tissue Engineering and Medical Devices, BiomMedD 2014; Constanta; Romania; 17 September 2014 through 20 September 2014; Code 118479
ISSN: 10139826 ISBN: 978-303835432-1 DOI: 10.4028/www.scientific.net/KEM.638.54 (autor de corespondență)

3. Serafim, A., Vasile, E., Cristescu, I., Istodorescu, M., **Stancu, I.C.**
Biomimetic apatite deposition within casein-loaded hydrogel scaffolds
Key Engineering Materials, 614, pp. 22-25, 2014
ISSN: 10139826 ISBN: 978-303835128-3
25th Symposium and Annual Meeting of the International Society for Ceramics in Medicine, ISCM 2013; Bucharest; Romania; 7 November 2013 through 10 November 2013; Code 107068
DOI: 10.4028/www.scientific.net/KEM.614.22 (autor de corespondență)

4. Cecoltan, S., Petre, D.G., Stan, E.-G., Vasile E, Cioflan HE, Istodorescu M, Cristescu, Marinescu R, Laptoiu, D., **Stancu, I.-C.**
Alginate used to develop bio-inspired composite microparticles for bone regeneration
Key Engineering Materials, 638, 20-26, 2014
6th International Conference on Biomaterials, Tissue Engineering and Medical Devices, BiomMedD 2014; Constanta; Romania; 17 September 2014 through 20 September 2014; Code 118479
ISSN: 10139826 ISBN: 978-303835432-1 DOI: 10.4028/www.scientific.net/KEM.638.20 (autor de corespondență)

5. Serafim, A., Petre, D.G., Moraru, L., Ciflan HE, Vasile E, Mastalier B, Petrutescu, M., **Stancu, I.-C.**
Gelatin-PVP hydrogels with potential skin grafts applications
Key Engineering Materials, 638, 38-46, 2014 ISSN: 10139826 ISBN: 978-303835432-1
6th International Conference on Biomaterials, Tissue Engineering and Medical Devices, BiomMedD 2014; Constanta; Romania; 17 September 2014 through 20 September 2014; Code 118479
DOI: 10.4028/www.scientific.net/KEM.638.38 (autor de corespondență)

Proiecte de cercetare

Ca director de proiect și responsabil partener UPB:

1. *Obținerea de materiale fibroase de uz ortopedic prin grefare pe suporturi polimerice naturale*, Grant AT CNC SIS 2, 175/ 2004) – 5000 lei - **Director proiect**
2. *Materiale hibride polimerice performante pentru regenerare osoasa; combinatie revolutionara de biomineralizare sablonata si aderenta celulara*, CEEX 5853/18.09.2006, 2006-2008, 136000 lei - **Director proiect**
3. *Biomateriale polimerice pentru regenerare osoasa. Biomimetism prin nanostructurarea suprafeței*, IDEI 729/2009, PCE-2008, 2009-2011, 452498 lei – **Director proiect**
4. *Studiul biomineralizării biomimetice folosind hidrogeluri 3D functionalizate specific*, TE-80 06/02.08.2010, 594440 lei (2010-2013) – **Director proiect**
5. *Biomateriale macroporoase injectabile bioactive pentru regenerare osoasa*, PARTENERIATE PN-II-PT-PCCA-2011-3.2-0885, 183/2012, 3250000 lei (03.07.2012-30.06.2015) – **Director proiect (Coordonator UPB)**
6. *Designul rațional și sinteza unor suporturi inteligente bioactive pentru tratamentul personalizat al plăgilor cutanate acute și cronice (ZETTAskin)*, PARTENERIATE PN-II-PT-PCCA-2013-4-0816, 201/2014, CH 39-14-07, 2014-2017, 250000 lei (2014 - 2017) - **Responsabil de proiect pentru partenerul UPB**
7. *Personalizarea plaselor pentru tratarea herniei prin ingineria suprafețelor, utilizând hidrogeluri* 133PED din 01/02/2017 (PN-III-P2-2.1-PED-2016-1683) BIOWALL

Participare ca membru în echipa de lucru a altor proiecte naționale:

8. *Biopolimeri osteoinductori. Evaluarea biocompatibilității și osteointegrării pe animale mici*, VIASAN 160/ 2004 - membru în echipă
9. *Materiale multifuncționale de înaltă performanță cu arhitectura specială folosite în chirurgia ortopedică*, CEEX ET cod MEC 79/2006 - membru în echipă
10. *Noi concepte și strategii pentru dezvoltarea cunoașterii unor noi structuri biocompatibile în bioinginerie*, PCCE 248/2008, membru în echipă

Membru în echipă – proiecte internaționale:

1. *Molecular Imaging for Label Free Detection in Functional Proteomics*, Coordonator Prof. R. Salzer, FP5-HPMD-CT-2001-00077
2. *Injectable macroporous biomaterials based on Calcium Phosphate cements for bone regeneration*, Coordonator partener U Gent Prof. E. Schacht, FP6-STRP NMP3-CT-2005-013912
3. *Plan Etat-Region Pays de la Loire*, Universitatea Angers, Facultatea de Medicina - bursier, membru în echipa, coordonator stagiu Prof. D. Chappard
4. *Tehnologii inovatoare pentru asigurarea calitatii materialelor în sanatate, energie și mediu – Centrul pentru Soluții INOVatoare de Fabricație a Biomaterialelor Inteligente și Suprafețelor BIOMEDicale (INOVABIOMED)*, POC-A.1-A.1.1.1- F- 2015 - Proiecte de investiții pentru instituții publice de CD/ universități, declarat câștigător 97/100, 2016, cfr. anexa la Decizia nr. 9214/28.04.2016 – **Responsabil tehnic, membru echipă management**