

LISTA DE LUCRĂRI

elaborate în domeniul disciplinelor postului

Candidat: Dr. Vlăsceanu P. George-Mihail

Post: Asistent universitar, poziția 22, Departamentul Bioinginerie și Biotehnologie, Facultatea de Inginerie Medicală, POLITEHNICA București

h-index: 18 (Scopus/Scholar/WoS) | >1300 citări | 39 articole ISI | 8 capitole de carte [iunie 2026]

Notă: candidatul este subliniat și boldat în lista de autori

a) Lista celor maximum 10 lucrări considerate de candidat a fi cele mai relevante pentru domeniul disciplinelor postului pentru care candidează.

Lucrări cu accent pe domeniu principal al postului

- Ris-1.** Ignat S.-R., Lazăr A.D., Șelaru A., Samoilă I., **Vlăsceanu G.M.**, Ioniță M., Radu E., Dinescu S., Costache M. Versatile biomaterial platform enriched with graphene oxide and carbon nanotubes for multiple tissue engineering applications. *Int. J. Mol. Sci.* (2019), IF 4.90, Q1. DOI: 10.3390/ijms20163868, WOS:000484411100025, eISSN 1422-0067.
- Ris-2.** **Vlăsceanu G.M.**, Crica L.E., Pandele A.M., Ioniță M. Graphene oxide reinforcing genipin crosslinked chitosan-gelatin blend films. *Coatings* (2020), IF 2.79, Q2. DOI: 10.3390/coatings10020189, WOS:000522487300099, eISSN 2079-6412. [autor principal]
- Ris-3.** **Vlăsceanu G.M.**, Șelaru A., Dinescu S., Balta C., Herman H., Gharbia S., Hermenean A., Ioniță M., Costache M. Comprehensive Appraisal of Graphene–Oxide Ratio in Porous Biopolymer Hybrids Targeting Bone-Tissue Regeneration. *Nanomaterials* (2020), IF 4.30, Q2. DOI: 10.3390/nano10081444, WOS:000567257900001, eISSN 2079-4991. [autor principal]
- Ris-4.** Marin M.-M., Kaya M.G.A., **Vlăsceanu G.M.**, Ghitman J., Radu I.C., Iovu H. The effect of crosslinking agents on the properties of type II collagen biomaterials. *Materiale Plastice* (2021), IF 0.6, Q4. DOI: 10.37358/MP.20.4.5416, WOS:000617344900016, ISSN 0025-5289.
- Ris-5.** Alexa R.L., Iovu H., Trica B., Zaharia C., Serafim A., Alexandrescu E., Radu I.-C., **Vlăsceanu G.**, Preda S., Ninciuleanu C.M., Ianchis R. Assessment of naturally sourced mineral clays for 3D printing of biopolymer-based nanocomposite inks. *Nanomaterials* (2021), IF 4.30, Q2. DOI: 10.3390/nano11030703, WOS:000633961700001, eISSN 2079-4991.
- Ris-6.** Stavarache C.E., Ghebaur A., Dinescu S., Samoilă I., Vasile E., **Vlăsceanu G.M.**, Iovu H., Gârea S.A. 5-aminosalicylic acid loaded chitosan-carrageenan hydrogel beads with potential application for the treatment of inflammatory bowel disease. *Polymers* (2021), IF 4.90, Q1. DOI: 10.3390/polym13152463, WOS:000682316300001, eISSN 2073-4360.
- Ris-7.** Balahura L.-R., Dinescu S., Balaș M., Cernescu A., Lungu A., **Vlăsceanu G.M.**, Iovu H., Costache M. Cellulose Nanofiber-Based Hydrogels Embedding 5-FU Promote Pyroptosis Activation in Breast Cancer Cells and Support Human Adipose-Derived Stem Cell Proliferation. *Pharmaceutics* (2021), IF 5.50, Q1. DOI: 10.3390/pharmaceutics13081189, WOS:000690080900001, eISSN 1999-4923.
- Ris-8.** Alexa R.L., Ianchis R., Savu D., Temelie M., Trica B., Serafim A., **Vlăsceanu G.M.**, Alexandrescu E., Preda S., Iovu H. 3D printing of alginate-natural clay hydrogel-based nanocomposites. *Gels* (2021), IF 4.6, Q1. DOI: 10.3390/gels7040211, WOS:000742895700001, eISSN 2310-2861.
- Ris-9.** Șelaru A.†, Herman H.†, **Vlăsceanu G.M.†**, Dinescu S., Gharbia S., Baltă C., Roșu M., Mihali C.V., Ioniță M., Serafim A., Iovu H., Hermenean A., Costache M. Graphene–oxide porous biopolymer hybrids enhance in vitro osteogenic differentiation and promote ectopic osteogenesis in vivo. *Int. J. Mol. Sci.* (2022), IF 4.90, Q1. DOI: 10.3390/ijms23010491, WOS:000758851200001, eISSN 1422-0067. [†contribuție egală, autor principal]
- Ris-10.** Necolau M.I., Damian C.M., Fierăscu R.C., Chiriac A.-L., **Vlăsceanu G.M.**, Vasile E., Iovu H. Layered clay–graphene oxide nanohybrids for the reinforcement and fire-retardant properties of polyurea matrix. *Polymers* (2022), IF 4.90, Q1. DOI: 10.3390/polym14010066, WOS:000751035700001, eISSN 2073-4360.

b). TEZA DE DOCTORAT (T)

- T1. Vlăsceanu G.M.** Materiale compozite polimerice cu aplicații biomedicale. Teză de doctorat, Școala Doctorală Inginerie Chimică și Biotehnologii, POLITEHNICA București. Susținut: ianuarie 2025.

c). CĂRȚI PUBLICATE (C)

Cb – Cărți de specialitate publicate în edituri internaționale acreditate (autor / coautor)

- Cb1. Vlăsceanu G.M.**, Marin S., Țiplea R.E., Bucur I.R., Lemnaru M., Marin M.M., Grumezescu A.M., Andronesu E. Silver nanoparticles in cancer therapy. Capitol în Nanobiomaterials in Cancer Therapy: Applications of Nanobiomaterials (2016). Elsevier. DOI: 10.1016/B978-0-323-42863-7.00002-5, ISBN 978-0-323-42863-7, WOS:000473125900015.
- Cb2.** Dolete G., Ilie C.F., Nicoară I.F., **Vlăsceanu G.M.**, Grumezescu A.M. Understanding dental implants. Capitol în Nanobiomaterials in Dentistry: Applications of Nanobiomaterials (2016). Elsevier. DOI: 10.1016/B978-0-323-42867-5.00002-3, ISBN 978-0-323-42867-5, WOS:000403699600004.
- Cb3. Vlăsceanu G.M.**, Holban A.M., Grumezescu A.M. Alternative strategies to reduce the incidence of severe infections. Capitol în Biofilms and Implantable Medical Devices: Infection and Control (2017). Woodhead / Elsevier. DOI: 10.1016/B978-0-08-100382-4.00009-5, ISBN 978-0-08-100382-4, WOS:000415038100010.
- Cb4.** Puiu R.A., Dolete G., Ene A.-M., Nicoară B., **Vlăsceanu G.M.**, Holban A.M., Grumezescu A.M., Bolocan A. Properties of biofilms developed on medical devices. Capitol în Biofilms and Implantable Medical Devices: Infection and Control (2017). Woodhead / Elsevier. DOI: 10.1016/B978-0-08-100382-4.00002-2, WOS:000415038100003.
- Cb5. Vlăsceanu G.M.**, Victor L., Maricica H., Raluca T., Vlad O., Gheorghe I., Bolocan A., Grumezescu A.M., Holban A.M. Nanostructures for cancer therapy: From targeting to selective toxicology. Capitol în Nanostructures for Cancer Therapy (2017). Elsevier. DOI: 10.1016/B978-0-323-46144-3.00030-1, ISBN 978-0-323-46144-3, WOS:000411703700032.

Cc – Cărți publicate în alte edituri academice / locale, cu ISBN

- Cc1.** Ionita M., Crica L., **Vlăsceanu G.M.**, Iovu H. An Introduction to Computer Simulation Methods for Biomaterials Design. Capitol în Biomedical Engineering; Introduction to Current Approaches (2016). Ed. Mariana Ionita. ISBN: 978-606-23-0582-6.
- Cc2.** Fufă O., **Vlăsceanu G.M.**, Dolete G., Cabuzu D., Puiu R.A., Cîrjă A., Nicoară B., Grumezescu A.M. Nanostructured composites based on biodegradable polymers and silver nanoparticles. Capitol în Handbook of Composites from Renewable Materials (2017). Wiley. DOI: 10.1002/9781119441632.ch144, ISBN: 9781119224365.
- Cc3. Vlăsceanu G.**, Grumezescu A.M., Gheorghe I., Chifiriuc M.C., Holban A.M. Quantum dots for bioimaging and therapeutic applications. Capitol în Nanostructures for Novel Therapy: Synthesis, Characterization and Applications (2017). Elsevier. DOI: 10.1016/B978-0-323-46142-9.00018-9, ISBN: 9780323461429.

d). ARTICOLE / STUDII IN EXTENSO PUBLICATE (R)

Alte articole în reviste de specialitate de circulație internațională recunoscute, indexate ISI/WoS

- Ris-11.** Alexa R.L., Cucuruz A., Ghițulică C.-D., Voicu G., Stamat L.-R., Dinescu S., **Vlăsceanu G.M.**, Stavarache C., Ianchis R., Iovu H., Costache M. 3D Printable Composite Biomaterials Based on GelMA and Hydroxyapatite Powders Doped with Cerium Ions for Bone Tissue Regeneration. Int. J. Mol. Sci. (2022), IF 4.90, Q1. DOI: 10.3390/ijms23031841, WOS:000757541700001, eISSN 1422-0067.
- Ris-12.** Panaitescu D.M., Stoian S., Frone A.N., **Vlăsceanu G.M.**, Baci D.D., Gabor A.R., Nicolae C.A., Radițoiu V., Alexandrescu E., Cășărică A., Damian C., Stănescu P. Nanofibrous scaffolds based on bacterial cellulose crosslinked with oxidized sucrose. Int. J. Biol. Macromol. (2022), IF 8.5, Q1. DOI: 10.1016/j.ijbiomac.2022.08.189, WOS:000860200500005, ISSN 0141-8130.
- Ris-13.** Leu Alexa R., Cucuruz A., Ghițulică C.-D., Voicu G., Stamat L.-R., Dinescu S., **Vlăsceanu G.M.**, Iovu H., Serafim A., Ianchis R., Ciocan L.-T., Costache M. 3D Printed Composite Scaffolds of GelMA and Hydroxyapatite Nanopowders Doped with Mg/Zn Ions – Osteogenic Markers. Int. J. Mol. Sci. (2022), IF 4.30, Q2. DOI: 10.3390/nano12193420, WOS:000867940700001, eISSN 2079-4991.

- Ris-14.** Toader A.G., Vlasceanu G.M., Serafim A., Banciu A., Ionita M. Double-Reinforced Fish Gelatin Composite Scaffolds for Osteochondral Substitutes. *Materials* (2023), IF 3.20, Q1. DOI: 10.3390/ma16051815, WOS:000947823100001, eISSN 1996-1944. [autor corespondent]
- Ris-15.** Oprică G.M., Panaitescu D.M., Usurelu C.D., Vlăsceanu G.M., Stanescu P.O., Lixandru B.E., Vasile V., Gabor A.R., Nicolae C.-A., Ghiurea M., Frone A.N. Nanocellulose Sponges Containing Antibacterial Basil Extract. *Int. J. Mol. Sci.* (2023), IF 4.90, Q1. DOI: 10.3390/ijms241411871, WOS:001036135800001, ISSN 1661-6596.
- Ris-16.** Cernencu A.I., Vlasceanu G.M., Serafim A., Pircalabioru G., Ionita M. 3D double-reinforced graphene oxide – nanocellulose biomaterial inks for tissue engineered constructs. *RSC Advances* (2023), IF 4.59, Q2. DOI: 10.1039/d3ra02786d, WOS:001045110000001, eISSN 2046-2069.
- Ris-17.** Boretti G., Giordano E., Ionita M., Vlasceanu G.M., Sigurjónsson Ó.E., Gargiulo P., Lovecchio J. Human Bone-Marrow-Derived Stem-Cell-Seeded 3D Chitosan-Gelatin-Genipin Scaffolds Show Enhanced ECM Mineralization under Perfusion Flow in Osteogenic Medium. *Materials* (2023), IF 3.20, Q1. DOI: 10.3390/ma16175898, WOS:001062797800001, eISSN 1996-1944.
- Ris-18.** Ianchis R., Marin M.M., Alexa R.L., Gifu I.C., Alexandrescu E., Gradisteanu Pircalabioru G., Vlasceanu G.M., Teodorescu G.M., Serafim A., Preda S., Nistor C.L., Petcu C. Nanoclay-reinforced alginate/salecan composite inks for 3D printing applications. *Int. J. Bioprinting* (2023), IF 6.00, Q1. DOI: 10.36922/ijb.0967, WOS:001139800000001, ISSN 2424-7723.
- Ris-19.** Stavarache C., Ghebaur A., Serafim A., Vlăsceanu G.M., Vasile E., Gârea S.A., Iovu H. Fabrication of k-carrageenan/alginate/CMC based scaffolds via 3D printing for potential biomedical applications. *Polymers* (2024), IF 4.90, Q1. DOI: 10.3390/polym16111592, WOS:001245689700001, eISSN 2073-4360.
- Ris-20.** Stavarache C., Gârea S.A., Serafim A., Olăreț E., Vlăsceanu G.M., Marin M.M., Iovu H. Three-dimensional-printed sodium alginate and k-carrageenan-based scaffolds with potential biomedical applications. *Polymers* (2024), IF 4.90, Q1. DOI: 10.3390/polym16030305, WOS:001160027600001, eISSN 2073-4360.
- Ris-21.** Cojocaru E., Oprea M., Vlăsceanu G.M., Nicolae M.C., Popescu R.C., Mereuță P.E., Toader A.G., Ioniță M. Dual nanofiber and graphene reinforcement of 3D printed biomimetic supports for bone tissue repair. *RSC Advances* (2024), IF 4.59, Q2. DOI: 10.1039/d4ra06167e, WOS:001334589900001, eISSN 2046-2069.
- Ris-22.** Radu I.C., Tanasa E., Dinescu S., Vlasceanu G., Zaharia C. Advanced Nanobiocomposite Hydrogels Incorporating Organofunctionalized LDH for Soft Tissue Engineering Applications. *Polymers* (2025), IF 4.90, Q1. DOI: 10.3390/polym17040536, WOS:001431896500001, eISSN 2073-4360.
- Ris-23.** Dobrisan M.R., Toader A.G., Chiticaru E.A., Vlasceanu G.M., Popescu R.C., Nicoara A.I., Podaru A.I., Toader G., Rotariu T., Ionita M. Nanostructured gelatin-gellan inks double reinforced with cellulose nanofibrils and graphene derivatives for 3D printing in bone regeneration applications. *Mater. Today Adv.* (2025), IS 8.94, Q1. DOI: 10.1016/j.mtadv.2025.100621, WOS:001573457800001, eISSN 2590-0498.
- Ris-24.** Vlăsceanu G.M., Zamfir C.I., Baltă C., Herman H., Ciceu A., Duma A.M., Ionita M., Popescu R.C., Hermenean A. Functionalized Reduced Graphene Oxide-Based Nanocomposite Hydrogels for Enhanced Osteogenesis in Bone Tissue Engineering. *Adv. Healthcare Mater.* (2025), IF 9.60, Q1. DOI: 10.1002/adhm.202501941, WOS:001546136700001, eISSN 2192-2640. [autor principal]
- Ris-25.** Caramarin S., Ilie C., Popescu R.C., Vlăsceanu G.M., Truşcă R.D., Oprea O.C., Badea C.D., Voicu G. Processing and characterization of Ca₃ZrSi₂O₉ ceramics doped with Ag⁺ ions for bone tissue engineering applications. *J. Alloys Compd.* (2025), IF 6.30, Q1. DOI: 10.1016/j.jallcom.2025.185099, WOS:001625632200001, eISSN 0925-8388.
- Ris-26.** Manescu V., Antoniac A., Moraru M.C., Antoniac I., Cotrut C.M., Gradinaru S., Dreanca A.I., Sevestre B., Pop R., Tabaran F.A., Vlasceanu G.M., Ionita M., Manole M. Suitability of Mg-Nd and Mg-Zn Alloys to Obtain Biodegradable Structures for Bone Defects. *J. Funct. Biomater.* (2025), IF 5.20, Q1. DOI: 10.3390/fbm16110423, WOS:001623847400001, eISSN 2079-4983.
- Ris-27.** Cojocaru E., Chiticaru E.A., Vlăsceanu G.M., Nicolae M.C., Popescu R.C., Dobrişan M.R., Toader G.A., Ioniță M. 3D printing of multicomponent polymeric inks enables hierarchical hybrid architectures for bone tissue regeneration. *Mater. Today Adv.* (2026), IS 8.94, Q1. DOI: 10.1016/j.mtadv.2025.100683, WOS:001644539900001, eISSN 2590-0498.
- Ris-28.** Marin M.M., Iancu J.E., Vlaicu P.A., Kaya D.A., Kaya-Albu M.G., Constantinescu R.R., Popescu D.I., Vlasceanu G.M., Tihauan B.M., Mircea M.L., Grigore D.M., Ignat M. Formulation and Characterization of Hydrogel Based on Pectin, Collagen, Alginate and Myrtus communis Essential Oil for Applications in Skin Regeneration. *Appl. Sci.* (2026), IF 2.50, Q2. DOI: 10.3390/app16010186, WOS:001657145600001, eISSN 2076-3417.

- Ris-29.** Marin Ș., Vlăsceanu G.M., Țiplea R.E., Bucur I.R., Lemnaru M., Marin M.M., Grumezescu A.M. Applications and toxicity of silver nanoparticles: A recent review. *Curr. Top. Med. Chem.* (2015), IF 3.29, Q3. DOI: 10.2174/1568026615666150414142209, WOS:000355196900006, ISSN 1568-0266.
- Ris-30.** Ioniță M., Vlăsceanu G.M., Watzlawek A.A., Voicu S.I., Burns J.S., Iovu H. Graphene and functionalized graphene: Extraordinary prospects for nanobiocomposite materials. *Compos. Part B: Eng.* (2017), IF 14.19, Q1. DOI: 10.1016/j.compositesb.2017.03.031, WOS:000407413000004, ISSN 1359-8368.
- Ris-31** Amărăndi R.-M., Becheru D.F., Vlăsceanu G.M., Ioniță M., Burns J.S. Advantages of Graphene Biosensors for Human Stem Cell Therapy Potency Assays. *BioMed Res. Int.* (2018), IF 2.29, Q3. DOI: 10.1155/2018/1676851, WOS:000433530100001, ISSN 2314-6133.
- Ris-32.** Vlăsceanu G.M., Amărăndi R.-M., Ioniță M., Tite T., Iovu H., Pîlan L., Burns J.S. Versatile graphene biosensors for enhancing human cell therapy. *Biosens. Bioelectron.* (2018), IF 10.50, Q1. DOI: 10.1016/j.bios.2018.04.053, WOS:000442191900036, ISSN 0956-5663. [autor principal]
- Ris-33.** Becheru D.F., Vlăsceanu G.M., Banciu A., Vasile E., Ioniță M., Burns J.S. Optical graphene-based biosensor for nucleic acid detection; influence of graphene functionalization and ionic strength. *Int. J. Mol. Sci.* (2018), IF 4.90, Q1. DOI: 10.3390/ijms19103230, WOS:000448951000385, eISSN 1422-0067.
- Ris-34.** Ghitman J., Stan R., Vlăsceanu G., Vasile E., Iovu H. Predicting the drug loading efficiency into hybrid nanocarriers based on PLGA-vegetable oil using molecular dynamic simulation approach and Flory-Huggins theory. *J. Drug Deliv. Sci. Technol.* (2019), IF 4.90, Q1. DOI: 10.1016/j.jddst.2019.101203, WOS:000487963600072, ISSN 1773-2247.
- Ris-35.** Vlăsceanu G.M., Iovu H., Ioniță M. Graphene inks for the 3D printing of cell culture scaffolds and related molecular arrays. *Compos. Part B: Eng.* (2019), IF 14.19, Q1. DOI: 10.1016/j.compositesb.2019.01.010, WOS:000460193400068, ISSN 1359-8368. [autor principal]
- Ris-36.** Vlăsceanu G.M., Ioniță M., Iovu H. Physico-chemical enhancements of natural biopolymer matrices by reinforcing with complex carbonaceous-oxidic fillers. *UPB Sci. Bull., Series B* (2021), IF 0.30, Q4. WOS:000661663200013, ISSN 1454-2331.
- Ris-37.** Lungu A., Cernescu A.I., Vlăsceanu G.M., Florea N.M., Ioniță M., Iovu H. 3D POSS cages decorated 2D graphenic sheets: A versatile platform for silicon-carbonaceous nano-additives design. *Compos. Part B: Eng.* (2021), IF 14.19, Q1. DOI: 10.1016/j.compositesb.2020.108578, WOS:000606481400017, ISSN 1359-8368.
- Ris-38.** Vlăsceanu G.M., Ioniță M., Popescu C.C., Giol E.D., Ionescu I., Dumitrașcu A.-M., Floarea M., Boerasu I., Necolau M.I., Olăreț E., Ghitman J., Iovu H. Chitosan-Based Materials Featuring Multiscale Anisotropy for Wider Tissue Engineering Applications. *Int. J. Mol. Sci.* (2022), IF 4.90, Q1. DOI: 10.3390/ijms23105336, WOS:000803390200001, eISSN 1422-0067.
- Ris-39.** Ioniță M., Vlăsceanu G.M., Toader A.G., Manole M. Advances in therapeutic contact lenses for the management of different ocular conditions. *J. Pers. Med.* (2023), IF 3.00, Q1. DOI: 10.3390/jpm13111571, WOS:001120800300001, eISSN 2075-4426.

Candidat,
Dr. Vlăsceanu P. George-Mihail

Semnătura:



Data:

03.06.2026