

Listă de lucrări

ResearcherID: E-8009-2013 <http://www.researcherid.com/rid/E-8009-2013>

Scopus ID: 56800564900 <https://www.scopus.com/authid/detail.uri?authorId=56800564900>

GoogleScholar: <https://scholar.google.com/citations?user=wWxLKzcAAAAJ&hl=en>

ORCID: 0000-0003-2765-0399 <https://orcid.org/0000-0003-2765-0399>

Brainmap: U-1700-036Y-5475

1. Lista celor mai relevante lucrări

1. A. Cazacu, C. Larosa, P. Beaunier, G. Laurent, P. Nanni, L. Mitoseriu, I. Lisiecki, *Self-organization and/or nanocrystallinity of Co nanocrystals effects on the oxidation process using high-energy electron beam*, ADVANCED FUNCTIONAL MATERIALS, 24(1), 164 – 170, 2014, doi: 10.1002/adfm.201301465, ISSN: 1616-301X. Factor de impact: **11.805**
2. Bodale, I.; Mihalache, G., Achittei, V., Teliban, G.-C., Cazacu, A., Stoleru, V., *Evaluation of the nutrients uptake by tomato plants in different phenological stages using an electrical conductivity technique*, Agriculture, 11(4), 292, 2021. ISSN 2077-0472. <https://doi.org/10.3390/agriculture11040292>. Impact Factor: **2.925** (2020)
3. Lipșa F., E.-L. Ursu, C. Ursu, E. Ulea, A. Cazacu*, *Evaluation of the antifungal activity of gold - chitosan and carbon nanoparticles on Fusarium Oxysporum*, Agronomy-Basel, 10(8), 1143, 2020. ISSN 2073-4395. Impact factor: **3.417**.
4. Galeș, D. C., Trincă, L. C., Cazacu, A., Peptu, C. A., Jităreanu, G., *Effects of a hydrogel on the cambic chernozem soil's hydrophysic indicators and plant morphophysiological parameters*, GEODERMA, 267, 102–111, 2016, doi:10.1016/j.geoderma.2015.12.008, ISSN: 0016-7061. Factor de impact: **4.036**.
5. Cara, I.G., Trinca, L.C., Trofin, A.E., Cazacu, A., Topa, D., Peptu, C.A., Jitareanu, G., *Assessment of some straw-derived materials for reducing the leaching potential of Metribuzin residues in the soil*, APPLIED SURFACE SCIENCE, 358, 586-594, 2015, doi: 10.1016/j.apsusc.2015.08.141, ISSN: 0169-4332. Factor de impact: **3.150**.
6. A. Neagu, L. Curecheriu, M. Airimioaei, A. Cazacu, A. Cernescu, L. Mitoseriu, *Impedance spectroscopy characterization of relaxation mechanisms in gold–chitosan nanocomposites*, COMPOSITES PART B: ENGINEERING, 71, 210–217, 2015, doi:10.1016/j.compositesb.2014.11.038, ISSN: 1359-8368. Factor de impact: **3.850**.
7. A. M. Neagu, L. P. Curecheriu, A. Cazacu, L. Mitoseriu, *Impedance analysis and tunability of BaTiO₃-chitosan composites: towards active dielectrics for flexible electronics*, COMPOSITES PART B: ENGINEERING, 66, 109 – 116, 2014, doi:10.1016/j.compositesb.2014.04.020, ISSN: 1359-8368. Factor de impact: **2.983**
8. A. Cazacu, L. Curecheriu, A. Neagu, L. Padurariu, A. Cernescu, I. Lisiecki, L. Mitoseriu, *Tunable gold-chitosan nanocomposites by local field engineering*, APPLIED PHYSICS LETTERS, 102, 222903 (1–5), 2013; doi: 10.1063/1.4809673, ISSN: 0003-6951. Factor de impact: **3.515**
9. L. Tartau, A. Cazacu, V. Melnig, *Ketoprofen-liposomes formulation for clinical therapy*, JOURNAL OF MATERIALS SCIENCE: MATERIALS IN MEDICINE, 23(10), 2499-2507, 2012; doi: 10.1007/s10856-012-4712-5, ISSN: 0957-4530. Factor de impact: **2.141**.
10. A. Gârlea (Cazacu), V. Melnig, M. I. Popa, *Nanostructured chitosan – surfactant matrices as polyphenols nanocapsules template with zero order release kinetics*, JOURNAL OF MATERIALS SCIENCE: MATERIALS IN MEDICINE, 21(4), 1211–1223, 2010; doi 10.1007/s10856-009-3968-x, ISSN: 0957-4530. Factor de impact: **2.325**

2. Teza de doctorat

Teza de doctorat, intitulată „*Studiul comportamentului sensibil la stimuli a unor matrici biopolimere cu aplicații în sisteme cu eliberare controlată*”, a fost elaborată sub conducerea științifică a doamnei prof. dr. **Dana Ortansa Dorohoi**, Universitatea „Alexandru Ioan Cuza” din Iași, Facultatea de Fizică.

3. Cărți publicate:

1. A. Cazacu, I. Bodale, S. Oancea, *Fenomene de transfer și operații unitare*, Ed. „Ion Ionescu de la Brad, Iași, 2021, 262 pagini (format academic, 17x24 cm), ISBN 978-973-147-281-2.
2. V. Stoleru, N. Munteanu, I. Țenu, T. Stan, V. Muraru, G. Teliban, A. Cojocaru, I. Bodale, A. Cazacu, G. Mihalache, M. Gheorghiuțoiaie, V. Achitei, C. Pereș, *Perspective moderne în fertirigarea legumelor din spații*

protejate, Ed. „Ion Ionescu de la Brad, Iași, 2020, 206 pagini (format academic, 17x24 cm), ISBN 978-973-147-365-9.

3. S. Oancea, A. Cazacu, *Probleme rezolvate de fizică*, 2015, 215 pagini (format 14,8x21 cm), 174 pagini în format academic, Editura PIM, Iași, ISBN 978-606-13-2397-5.
4. V. Melnig, A. Gârlea (Cazacu), L. Obreja, *Lucrări de laborator de Biostructură - Partea I: Proprietăți ale unor soluții apoase*, 2008, 193 pagini (format academic, 17x24 cm), Ed. Univ. Alexandru Ioan Cuza, Iasi, Romania, ISBN 978 - 973 - 703 - 300 - 0, ISBN vol. I 978-973-703-355-0.

4. Capitol carte – editură internațională:

1. A. Cazacu, Capitolul 10 (p. 159-174) - *Role of UV-VIS Radiations in Analysis of Polymer Systems for Drug Delivery Applications* in *Electromagnetic Radiation in Analysis and Design of Organic Materials: Electronic and Biotechnology Applications*, edited by Dorohoi, D.O., Barzic, A., Aflori, M., **CRC Press, Taylor & Francis Group**, January 25, 2017, ISBN: 978-1-4987-7580-9, 233 Pages. Capitolul are 16 pagini cu 3729 caractere pe pagina, adică 19 pagini în format academic.
<http://dx.doi.org/10.1201/9781315164984>
<https://www.crcpress.com/Electromagnetic-Radiation-in-Analysis-and-Design-of-Organic-Materials-Electronic/Dorohoi-Barzic-Aflori/p/book/9781498775809>

5. Cereri brevete OSIM:

1. Cazacu A., Bodale I., Teliban, G.-C., Stoleru, V., Metodă de tratament a bulbilor de ceapă cu soluții de nanoparticule, nr. A/00329/12.06.2020

6. Articole in extenso, publicate în reviste cotate ISI cu factor de impact

1. Bodale, I.; Mihalache, G., Achittei, V., Teliban, G.-C., Cazacu, A., Stoleru, V., *Evaluation of the nutrients uptake by tomato plants in different phenological stages using an electrical conductivity technique*, *Agriculture*, 11(4), 292, 2021. ISSN 2077-0472. <https://doi.org/10.3390/agriculture11040292>. Impact Factor: **2.925** (2020) **ZONA ROȘIE**
2. Lipșa F., E.-L. Ursu, C. Ursu, E. Ulea, A. Cazacu*, *Evaluation of the antifungal activity of gold - chitosan and carbon nanoparticles on Fusarium Oxysporum*, *Agronomy-Basel*, 10(8), 1143, 2020. ISSN 2073-4395. Impact factor: **3.417**. **ZONA ROȘIE**
3. Galeș, D. C., Trincă, L. C., Cazacu, A., Peptu, C. A., Jităreanu, G., *Effects of a hydrogel on the cambic chernozem soil's hydrophysic indicators and plant morphophysiological parameters*, *GEODERMA*, 267, 102–111, 2016, doi:10.1016/j.geoderma.2015.12.008, ISSN: 0016-7061. Factor de impact: **4.036**. **ZONA ROȘIE**, TOP: **6**.
4. Cara, IG, Trinca, LC, Trofin, AE, Cazacu, A, Topa, D, Peptu, CA, Jitareanu, G, *Assessment of some straw-derived materials for reducing the leaching potential of Metribuzin residues in the soil*, *APPLIED SURFACE SCIENCE*, 358, 586-594, 2015, doi: 10.1016/j.apsusc.2015.08.141, ISSN: 0169-4332. Factor de impact: **3.150**. **ZONA ROȘIE**, TOP: **2**.
5. A. Neagu, L. Curecheriu, M. Airimioaei, A. Cazacu, A. Cernescu, L. Mitoseriu, *Impedance spectroscopy characterization of relaxation mechanisms in gold-chitosan nanocomposites*, *COMPOSITES PART B: ENGINEERING*, 71, 210–217, 2015, doi:10.1016/j.compositesb.2014.11.038, ISSN: 1359-8368. Factor de impact: **3.850**. **ZONA ROȘIE**, TOP: **5**.
6. A. M. Neagu, L. P. Curecheriu, A. Cazacu, L. Mitoseriu, *Impedance analysis and tunability of BaTiO₃-chitosan composites: towards active dielectrics for flexible electronics*, *COMPOSITES PART B: ENGINEERING*, 66, 109 – 116, 2014, doi:10.1016/j.compositesb.2014.04.020, ISSN: 1359-8368. Factor de impact: **2.983**. **ZONA ROȘIE**, TOP: **5**.
7. A. Cazacu, C. Larosa, P. Beaunier, G. Laurent, P. Nanni, L. Mitoseriu, I. Lisiecki, *Self-organization and/or nanocrystallinity of Co nanocrystals effects on the oxidation process using high-energy electron beam*, *ADVANCED FUNCTIONAL MATERIALS*, 24(1), 164 – 170, 2014, doi: 10.1002/adfm.201301465, ISSN: 1616-301X. Factor de impact: **11.805**. **ZONA ROȘIE**, TOP: **6**. **SRI: 9,204**
8. A. Cazacu, L. Curecheriu, A. Neagu, L. Padurariu, A. Cernescu, I. Lisiecki, L. Mitoseriu, *Tunable gold-chitosan nanocomposites by local field engineering*, *APPLIED PHYSICS LETTERS*, 102, 222903 (1 – 5), 2013; doi: 10.1063/1.4809673, ISSN: 0003-6951. Factor de impact: **3.515**. **ZONA ROȘIE**, TOP: **17**. **SRI: 2,780**
9. L. Tartau, A. Cazacu, V. Melnig, *Ketoprofen-liposomes formulation for clinical therapy*, *JOURNAL OF MATERIALS SCIENCE: MATERIALS IN MEDICINE*, 23(10), 2499-2507, 2012; doi: 10.1007/s10856-012-

4712-5, ISSN: 0957-4530. Factor de impact: **2.141**. ZONA GALBENĂ, TOP: 27.

10. A. Gârlea (Cazacu), V. Melnig, M. I. Popa, *Nanostructured chitosan – surfactant matrices as polyphenols nanocapsules template with zero order release kinetics*, JOURNAL OF MATERIALS SCIENCE: MATERIALS IN MEDICINE, 21(4), 1211–1223, 2010; doi 10.1007/s10856-009-3968-x, ISSN: 0957-4530. Factor de impact: **2.325**. ZONA GRI, TOP: 12.
11. V. Melnig, V. Pohoata, L. Obreja, A. Gârlea (Cazacu), M. Cazacu, *Water-soluble polyamidhydroxyurethane swelling behaviour*, JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS, 8(3), 1040-1043, 2006, ISSN: 1454-4164. Factor de impact: **1.106**
12. V. Melnig, A. Gârlea (Cazacu), L. Obreja, *Effect of soft-segment chemistry on polyurethane biocompatibility*, JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS, 8(3), 1302-1307, 2006, ISSN: 1454-4164. Factor de impact: **1.106**
13. V. Melnig, L. Obreja, A. Gârlea (Cazacu), *In vitro degradation and erosion of degradable lactate segmented polyurethanes*, JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS, 7(6), 2803-2808, 2005, ISSN: 1454-4164. Factor de impact: **1.138**

7. Rezumate publicate în reviste cotate ISI cu factor de impact

1. A. Cazacu, A. Cernescu, E.L. Ursu, *Biocompatible gold nanoparticles – chitosan composite films for medical implantation applications*, Basic & Clinical Pharmacology & Toxicology, 125(5), 27, 2019. Impact factor: **2.651**
2. C. Stefanescu, G. Dodi, A. Cazacu, C.M. Uritu, M. Pinteala, A. Timofti, V. Ghizdovat, I.C. Grierosu, *A study of the influence of physicochemical reaction parameters on the radiolabelling efficiency and stability of two types of ^{99m}Tc radiolabelled nanoparticles*, EUROPEAN JOURNAL OF NUCLEAR MEDICINE AND MOLECULAR IMAGING, 42, Supplement 1, S488-S489, 2015, ISSN: 1619-7070. Factor de impact: **5.537**. AI: 1.6.
3. L. Tartau, A. Gârlea (Cazacu), V. Melnig, *Design, structural characterisation and biocompatibility evaluation of tramadol loaded nanoparticulate systems*, EUROPEAN NEUROPSYCHOPHARMACOLOGY, 20, Supplement 3, S241-S242, 2010, doi:10.1016/S0924-977X(10)70299-6, ISSN: 0924-977X. Factor de impact: **4.201**. AI: 1.2.
4. D. Bîndar, A. Gârlea (Cazacu), L. Tartău, V. Melnig, *Design of magnesium chloride soft vehicle carrier*, MAGNESIUM RESEARCH, 22(3), 185S, 2009, ISSN 0953-1424. Factor de impact: **1.246**. AI: 0.2.

8. Articole ca prim autor/corespondent publicate în reviste indexate BDI

1. A. Cazacu, C. Pereş, G.C. Teliban, V. Stoleru, I. Bodale, *Evaluation of effects of gold nanoparticles in chitosan on hyacinth plants*, Lucrări Ştiinţifice USAMV Iaşi, seria Horticultură, 64(1), 23-28, 2021, ISSN: 1454-7376.
2. A. Cazacu, B. Ceică, I. Bodale, *The effect of climate change on thermal bioclimate indices in the Iasi region*, Lucrări Ştiinţifice USAMV Iaşi, seria Horticultură, 64(1), 29-34, 2021, ISSN: 1454-7376.
3. A. Cazacu, I. Bodale, A. I. Roşu, *Employing atmospheric sensors and turbulent energy cascade theory to quantify hazardous airborne transmissibility*, Buletinul Institutului Politehnic din Iaşi. Secţia Matematică. Mecanică teoretică. Fizică, 67(3), 9-19, 2021, ISSN 1224 - 7863.
4. A. Cazacu, C. Rotărescu, I. Bodale, *The relaxation effects in the Preisach - Néel model of patterned media*, Buletinul Institutului Politehnic din Iaşi. Secţia Matematică. Mecanică teoretică. Fizică, 67(2), 9-17, 2021, ISSN 1224 - 7863.
5. F.D. Lipşa, E.L. Ursu, A.M. Gafencu, M. A. Florea, A. Cazacu*, *Assessment of antifungal activity of gold–chitosan and carbon nanoparticles against Rhizoctonia solani Kühn*, SCIENTIFIC PAPERS-SERIES A-AGRONOMY, 64(2), 249-254, 2021. ISSN: 2285-5785.
6. A. Cazacu, S.C. Boca, I. Bodale, *The effects of extremely low frequency magnetic fields on tomato seeds germination*, Lucrări Ştiinţifice USAMV Iaşi, seria Horticultură, 63(2), 249-254, 2020. ISSN: 1454-7376.
7. A. Cazacu, A. I. Roşu, I. Bodale, *Chitosan-based polymer membranes for paracetamol controlled-release systems*, Buletinul Institutului Politehnic din Iaşi. Secţia Matematică. Mecanică teoretică. Fizică, 66(70), nr. 4, 19-28, 2020, ISSN 1224 - 7863.
8. I. Bodale, G.C. Teliban, E.L. Ursu, V. Stoleru, A. Cazacu*, *The influence of gold nanoparticles on germination of carrot seeds*, 19th International Multidisciplinary Scientific GeoConference SGEM 2019, 19(6.1), 451-458, 2019, ISSN: 1314-2704, ISBN: 978-619-7408-88-1, <https://doi.org/10.5593/sgem2019/6.1/S24.059>
9. A. Cazacu, M. Spânu, S. Oancea, I. Bodale, *Spectrophotometric study of the heavy metal effects in animal blood*. Lucrări Ştiinţifice USAMV Iaşi, seria Horticultură, 61(1), 23-28, 2018. ISSN: 1454-7376
10. A. Cazacu, S. Oancea, I. Bodale, *Analysis of proteins content from blood plasma of herbivorous and carnivorous*

animals. *Lucrări Științifice USAMV Iași, seria Horticultură*, 61(1), 29-34, 2018. ISSN: 1454-7376

11. Cazacu A., Bodale I., Ilcu F.R., Oancea S., *Biological effects of cyanides on growth dynamics of corn and wheat plants*, *Lucrări științifice, seria Horticultură*, 60(2), 351 – 356, 2017, ISSN 1454-7376.
12. A. Cazacu, D. Pricop, L. Tartău, L. Hrițcu, M. Ștefan, L. Niță, C. Ionescu, V. Nica, G. Rusu, M. Dobromir, V. Melnig, *Effect on nerve structures of functionalized gold-chitosan nanoparticles obtained by one pot synthesis*, *Analele Științifice ale Universității Alexandru Ioan Cuza Iași, secțiunea Genetică și Biologie Moleculară*, Tom XII, Fasc 1, 45-50, 2011, ISSN 1582-3571.
13. A. Gârlea (Cazacu), A. Manole, M. I. Popa, V. Melnig, *Chitosan-paracetamol nanostructure self-assembling matrices as drug delivery systems*, *Materiale Plastice*, 46(4), 356-362, 2009, ISSN: 0025-5289. **Factor de impact: 0.**
14. A. Gârlea (Cazacu), V. Melnig, M. I. Popa, G. Rusu, *Entrapment of tannic acid in chitosan based nanostructure matrices*, *Materiale Plastice*, 45(2), 193-197, 2008, ISSN: 0025-5289. **Factor de impact: 0.873.**
15. A. Gârlea (Cazacu), M. I. Popa, V. Pohoata, V. Melnig, *Ibuprofen/Ketoprofen Entrapment in Chitosan Based Vesicle Carrier*, *Romanian Journal of Biophysics*, 17(3), 157-168, 2007, ISSN: 1220-515X.
16. A. Gârlea (Cazacu), L. Obreja, R. Merfea, D. O. Dorohoi, V. Melnig, *The inverse problems of vibrational spectra of polyatomic molecules*, *Buletinul Institutului Politehnic din Iași. Secția I, Matematică. Mecanică teoretică. Fizică*, Tom LII (LVI), Fasc. 3-4, 69-82, 2006, ISSN 1244 - 7863.
17. A. Gârlea (Cazacu), L. Obreja, R. Merfea, D. O. Dorohoi, V. Melnig, *The inverse problems of rotational spectra of polyatomic molecules*, *Buletinul Institutului Politehnic din Iași. Secția I, Matematică. Mecanică teoretică. Fizică*, Tom L (LV), Fasc. 5, 61-71, 2006, ISSN 1244 - 7863.

9. Alte articole publicate în reviste indexate BDI (în calitate de coautor)

1. A. I. Roșu, A. Cazacu, I. Bodale, *On the study and possible applications of minimally complex chaos*, *Buletinul Institutului Politehnic din Iași. Secția Matematică. Mecanică teoretică. Fizică*, 67(3), 21-29, 2021, ISSN 1224 - 7863.
2. A. I. Roșu, A. Cazacu, I. Bodale, M.M. Cazacu, *Developing a concrete inequality condition for Taylor's hypothesis in common turbulent atmospheric flows*, *Buletinul Institutului Politehnic din Iași. Secția Matematică. Mecanică teoretică. Fizică*, 66(4), 49-55, 2020, ISSN 1224 - 7863.
3. Achiței V., Bodale I., Gheorghitoaie M.V., Cazacu A., Teliban G.C., Cojocaru A., Stoleru V., *Possibility of using tomato plants as a biosensor in the fertilization systems*, *Lucrări Științifice USAMV Iași, seria Horticultură*, vol. 62(2), 25-28, 2019, ISSN: 1454-7376.
4. Pereș C., Cazacu A., Bodale I., Mihalache G., Teliban G.C., Cojocaru A., Munteanu N., Iurea D., Stoleru V., *Yield and physiological parameters of Siriana F1 under unconventional and conventional stimulants*, *Lucrări Științifice USAMV Iași, seria Horticultură*, 62(2), 29-34, 2019, ISSN: 1454-7376.
5. C. Pereș, A. Cazacu, I. Motrescu, N. Munteanu, C. Inculeț, V. Stoleru, *Biometric indicators and yield of tomato under conventional and unconventional biostimulators*, *Bulletin UASVM Horticulture*, 76(1), 131-134, 2019. ISSN: 1843-5254
6. Bodale I., Cazacu A., Enea E.A., Oancea S., *Increasing the risk of violent tornadoes in Romania due to climate change*, *Lucrări științifice, seria Horticultură*, 60(2), 345 – 350, 2017, ISSN 1454-7376.
7. S. Oancea, A. Cazacu, S. Padureanu, *The fractal dimension as a measure of the corn root change to the nickel action*, *Lucrări științifice, seria Horticultură*, 58(1), 11 – 16, 2015, ISSN 1454-7376.
8. S. Oancea, S. Padureanu, A. Cazacu, A.V. Oancea, *About the radioactivity of some agricultural products from areas near crucea uranium mine*, *Lucrări științifice, seria Horticultură*, 57(2), 253 – 256, 2014, ISSN 1454-7376.
9. S. Oancea, A. Cazacu, A. V. Oancea, *The effects of magnetite on growth dynamics of corn plants*, *Lucrări științifice, seria Horticultură*, 55(2), 77 – 82, 2012, ISSN 1454-7376.
10. D. Bindar, A. Gârlea (Cazacu), L. Tartau, A. Chiriac, V. Melnig, *Acetaminophen Entrapped in Soft Matter Vesicles Carrier Design*, *Academic Journal of Manufacturing Engineering*, 8(1), 12-17, 2010, ISSN 1583-7904.
11. D. Bindar, L. Tartau, A. Gârlea (Cazacu), L. Nita, V. Melnig, *Effects of magnesium soft matter vesicles carrier on the behavioral manifestations in mice*, *Romanian Journal of Biophysics*, 20(1), 23–35, 2010, ISSN 1220-515X.
12. D. Bindar, A. Gârlea (Cazacu), L. Tartau, A. Chiriac, L. Nita, V. Melnig, *Effect of acetaminophen soft matter vesicles carrier in a somatic pain model in mice*, *Annals of the Romanian Society for Cell Biology*, 14(2), 256-260, 2009, ISSN 1583-6258.

10. Publicații in extenso, apărute în lucrări/volume ale principalelor conferințe internaționale de specialitate

1. D. Bindar, A. Gârlea (Cazacu), L. Tartau, A. Chiriac, V. Melnig, Acetaminophen entrapped in soft matter vesicles design based on nociceptive model in mice effects correlation, Proceeding of The 2nd International Conference on Polymers Processing in Engineering, „Dunarea de Jos” University, Galati, Romania, 225 – 232, 2009.
2. A. Gârlea (Cazacu), V. Melnig, M. I. Popa, G. Rusu, Tannic acid as polyphenol model entrapped in chitosan based nanostructure matrices, Proceeding of The 1st International Conference on Polymers Processing in Engineering, „Dunarea de Jos” University, Galati, Romania, 155-162, 2007.

11. Publicații in extenso, apărute în lucrări/volume ale principalelor conferințe naționale de specialitate

1. A. Cazacu, *Studiul efectului de plasmon de suprafață rezonant al nanoparticulelor de aur în chitosan*, Volumul Simpozionului Internațional „Universul Științelor” – Ediția a III-a, Iași, Romania, 1 – 6, 2012, ISBN 978-606-576-675-4.
2. L. Budeanu, A. Cazacu, L. Tartău, V. Melnig, *Evidențierea posibilității de distribuire a nanoparticulelor de argint administrate oral la șobolani*, Revista Științifică „V. Adamachi”, Universitatea “Alexandru Ioan Cuza” din Iași, Romania, XXI(1-4), 21-23, 2012, ISSN 1221 – 9363.
3. A. Gârlea (Cazacu), V. Pohoata, G. Singurel, V. Melnig, *Fluorescence anisotropy characterization of polymers*, Revista Științifică „V. Adamachi”, Universitatea “Alexandru Ioan Cuza” din Iași, Romania, 153-154, 2004, ISSN 1221 – 9363.
4. A. Gârlea (Cazacu), L. C. Ciobanu, D. O. Dorohoi, C. Ciobanu, M. O. Apostu, V. Tura, V. Melnig, *Dichroic ratio-stretching degree correlations at polyurethane derivatives thin sheets*, Proceedings of the Annual Symposium on Mathematics Applied in Biology and Biophysics, Lucrări științifice, seria Horticultură, 46, 197-202, 2003, ISSN 1454-7376.

12. Alte articole în extenso

1. D. Bîndar, A. Gârlea (Cazacu), L. Tartău, V. Melnig, *The analgesic effect of ketoprofen soft matter vesicles carrier*, Scientific Annals of “Alexandru Ioan Cuza din Iași” University, Biomaterials in Biophysics Medical Physics and Ecology, Tom II, 35-40, 2009, ISSN 2066 – 3927.
2. A. Gârlea (Cazacu), V. Melnig, M. I. Popa, G. Lisa, *Chitosan-polyphenols nanostructured matrices drug release kinetics studies*, Scientific Annals of “Alexandru Ioan Cuza din Iasi” University, s. Biomaterials in Biophysics, Medical Physics and Ecology, Tom I, 25-30, 2008, ISSN 1841-5318.

12. Prezentări la conferințe științifice internaționale

1. A. Cazacu, C. Pereș, G.C. Teliban, V. Stoleru, I. Bodale, *Evaluation of effects of gold nanoparticles in chitosan on hyacinth plants*, International Congress “Life Sciences Today for Tomorrow”, 21-22 octombrie, 2021, Iasi, Romania (oral).
2. A. Cazacu, B. Ceică, I. Bodale, *The effect of climate change on thermal bioclimate indices in the Iasi region*, International Congress “Life Sciences Today for Tomorrow”, 21-22 octombrie, 2021, Iasi, Romania (oral).
3. F.D. Lipșa, E.L. Ursu, A.M. Gafencu, M. A. Florea, A. Cazacu*, *Assessment of antifungal activity of gold–chitosan and carbon nanoparticles against Rhizoctonia solani Kühn*, International Conference "Agriculture for Life, Life for Agriculture", 3 - 5 iunie 2021, București, Romania (poster)
4. I. Bodale, G.Mihalache, V.Achiței, G. C. Teliban, A. Cazacu, V. Stoleru, *Evaluation of the Ions Uptake by Tomato Plants in Different Phenological Stages*, XIVth International Conference of Food Physicists, 5 – 6 noiembrie 2020, Iasi, Romania (oral)
5. F.-D. Lipșa, E.-L. Ursu, C. Ursu, A. Gafencu, A. Cazacu*, *Assessment of Antifungal Activity of Gold–Chitosan and Carbon Nanoparticles against Rhizoctonia solani Kühn*, XIVth International Conference of Food Physicists, 5 – 6 noiembrie 2020, Iasi, Romania (oral)
6. F. D. Lipșa, E. Ulea, E.-L. Ursu, A. Cazacu*, *Antifungal activity of gold-chitosan nanoparticles on Fusarium oxysporum*, International Conference "Agriculture for Life, Life for Agriculture", 4 - 6 iunie 2020, București, Romania. (poster)
7. Bodale I., Mihalache G., Cazacu A., Achiței V., Gheorghitoaie M. V., Teliban G. C., Cojocaru A., Filipov F., Stoleru V., *The electric signal measurements in tomato plants generated by the most important nutritional elements*, "Life sciences, a challenge for the future" Congress, 17-18 octombrie 2019, Iasi, Romania (oral)
8. Pereș C., Cazacu A., Bodale I., Mihalache G., Teliban G. C., Cojocaru A., Munteanu N., Iurea D.

- Stoleru V., Yield and physiological parameters of Siriana F1 under unconventional and conventional stimulants, "Life sciences, a challenge for the future" Congress, 17-18 octombrie 2019, Iasi, Romania (poster)
9. Achiței V., Bodale I., Gheorghiuoiaie M. V., Cazacu A., Teliban G. C., Cojocaru A., Stoleru V., Possibility of using tomato plants as a biosensor in the fertilization systems, International Scientific Congress "Life sciences, a challenge for the future", 17-18 octombrie 2019, Iasi, Romania (poster)
 10. Bodale I., Cazacu A., Mihalache G., Pereș C., Teliban G. C., Cojocaru A., Achiței V., Gheorghiuoiaie M. V., Munteanu N., Jităreanu G., Stoleru V., Evaluation of the physiological activity using the electric signal in tomato plants generated by nitrogenous nutritional elements, "Life sciences, a challenge for the future" Congress, 17-18 octombrie 2019, Iasi, Romania (poster)
 11. Peres C., Cazacu A., Bodale I., Mihalache G., Teliban G.C., Cojocaru A., Munteanu N., Iurea D., Stoleru V., Yield and physiological parameters of tomato under unconventional and conventional stimulants, *Biotehnologii avansate-realizări și perspective*, Ediția a V-a, Chișinău, Republica Moldova, p. 112, 21-22 octombrie 2019, ISBN: 978-9975-56-695-7.
 12. A. Cazacu, A. Cernescu, E.L. Ursu, Biocompatible gold nanoparticles - chitosan composite films for medical implantation applications, The 8th International Conference on Biomedical Engineering and Biotechnology (ICBEB 2019), 22 - 25 octombrie 2019, Seul, Coreea de Sud (oral).
 13. A. Cazacu, E. L. Ursu, G. C. Teliban, I. Bodale, V. Stoleru, *Gold Nanoparticles Synthesis and Investigation of their Effects on Vegetable Seeds Germination*, 16th International Conference on Nanosciences and Nanotechnologies (NN19), 2-5 iulie 2019, Thessaloniki, Greece (poster).
 14. I. Bodale, G.C. Teliban, E.L. Ursu, V. Stoleru, A. Cazacu, The influence of gold nanoparticles on germination of carrot seeds, 19th International Multidisciplinary Scientific GeoConference (SGEM2019), 28 iunie - 7 iulie, 2019, Albena, Bulgaria (poster)
 15. I. Bodale, V. Stoleru, G. Mihalache, A. Cazacu, C. Peres, G. Teliban, V. Achitei, A. Cojocaru, F. Filipov, *Measurements of the electric signal in tomato plants generated by the most important nutritional elements*, International Conference on Space Solutions for Sustainable Agriculture and Precision Farming - Parallel session on The 9th International Symposium „Soil Minimum Tillage Systems”, Cluj, Romania, 6-10 mai 2019 (poster).
 16. A. Cazacu, M. Spânu, S. Oancea, I. Bodale, Spectrophotometric study of the heavy metal effects in animal blood, "Life sciences, a challenge for the future" Congress, 18-19 octombrie 2018, Iasi, Romania (oral)
 17. I. Bodale, A. Cazacu, Study of capillary hysteresis in medium texture soil using Preisach model, "Life sciences, a challenge for the future" Congress, 18-19 octombrie 2018, Iasi, Romania (oral)
 18. A. Cazacu, S. Oancea, I. Bodale, Analysis of proteins content from blood plasma of herbivorous and carnivorous animals, "Life sciences, a challenge for the future" Congress, 18-19 octombrie 2018, Iasi, Romania (poster)
 19. I. Bodale, S. Oancea, A. Cazacu, Valorification of the economic potential of Rarau Massif based on climate conditions, "Life sciences, a challenge for the future" Congress, 18-19 octombrie 2018, Iasi, Romania (poster)
 20. S. Oancea, A. Cazacu, S. Padureanu, *The fractal dimension as a measure of nickel stress on plant roots*, Congresul Științific Internațional „Solul și hrana, resurse pentru o viață sănătoasă”, 22-24 oct 2015, Iasi, Romania (oral).
 21. C. Stefanescu, G. Dodi, A. Cazacu, C.M. Uritu, M. Pinteala, A. Timofti, V. Ghizdovat, I.C. Grierosu, *A study of the influence of physicochemical reaction parameters on the radiolabelling efficiency and stability of two types of ^{99m}Tc radiolabelled nanoparticles*, 28th Annual Congress of the European-Association-of-Nuclear-Medicine (EANM), 10 – 14 octombrie, 2015, Hamburg, Germania. (poster)
 22. I.G. Cara, L.C. Trincă, A.E. Trofin, A. Cazacu, D. Țopa, C.A. Peptu, G. Jităreanu, *Assessment of some straw derived biomaterials for reducing the leaching potential of herbicide residues in the soil*, 9th International Conference on Materials Science & Engineering, 5 – 7 martie 2015, Brasov, Romania. (oral)
 23. D.C. Galeș, L.C. Trincă, A. Cazacu, C.A. Peptu, G. Jităreanu, *Surface characterisation and biological properties evaluation of a hydrophilic material with applications in agriculture*, 9th International Conference on Materials Science & Engineering, 5 – 7 martie 2015, Brasov, Romania. (oral)
 24. S. Oancea, A. Cazacu, S. Padureanu, A.V. Oancea, *Regarding the Radioactivity of Local Produce from the Areas Near the Crucea Uranium Mine*, Congresul Științific Internațional „Științele vieții, o provocare pentru viitor”, 23-25 oct 2014, Iasi, Romania (oral).
 25. L.P. Curecheriu, A. Cazacu, Al. Neagu, L. Padurariu, L. Mitoseriu, *Tunable chitosan-based nanocomposite by local field engineering*, COST SIMUFER Action MPO904 Workshop Advances in Ferroelectrics and Multiferroics, Institute of Physics AS CR, 21 iulie 2013, Praga, Cehia. (oral)
 26. A. Cazacu, A. Neagu, L. Mitoseriu, V. Melnig, *Gold - chitosan membranes functionalization for flexible*

- electronics application*, Joint Conference COST MPO904 Action „Single-and multiphase ferroics and multiferroics with restricted geometries” & the 9th Edition IEEE-ROMSC 2012, 24 – 26 septembrie, Romania. (poster)
27. A. Cazacu, A. M. Neagu, L. Curecheriu, L. Mitoseriu, V. Melnig, *DC-conductivity and dielectric permittivity of chitosan-based membranes*, 9th International Conference on Physics of Advanced Materials, 20 – 23 septembrie 2012, Iasi, Romania. (poster)
 28. A. Cazacu, *Studiul efectului de plasmon de suprafață rezonant al nanoparticulelor de aur în chitosan*, Simpozionul Internațional „Universul Științelor” – Ediția a III-a, Iași, Romania, 8 septembrie 2012. (oral)
 29. A. Cazacu, L. P. Curecheriu, L. Mitoseriu, V. Melnig, *Electrical properties of chitosan-gold membranes*, The 8th General Conference of Balkan Physical Union, Constanta, Romania, 5 – 7 iulie 2012. (poster)
 30. S. Oancea, A. Cazacu, A. V. Oancea, *The effects of magnetite on growth dynamics of corn plants*, International Scientific Symposium “Horticulture – Science, Quality, Diversity And Harmony”, Iași, Romania, 24-26 mai 2012. (oral)
 31. A. Cazacu, L. Tartau, D. Bindar, L. C. Budeanu, V. Melnig, *Enhanced photonic reactivity to environmental stimuli analysis of gold-chitosan nanoparticles*, International Symposium “Horticulture - Science, Quality, Diversity and Harmony”, Iași, Romania, 26 – 28 mai 2011. (oral)
 32. L. C. Budeanu, A. Cazacu, L. Tartau, V. Nica, D. Bindar, V. Melnig, *High chemical reactivity of silver-poly(amidehidroxyurethane) coated nanoparticles*, International Symposium “Horticulture - Science, Quality, Diversity and Harmony”, Iași, Romania, 26 – 28 mai 2011. (oral)
 33. L. Tartau, A. Gârlea (Cazacu), V. Melnig, *Design, structural characterisation and biocompatibility evaluation of tramadol loaded nanoparticulate systems*, 23rd European College of Neuropsychopharmacology Congress, Amsterdam, Netherlands, 28 august – 1 septembrie 2010. (poster)
 34. R. V. Lupusoru, L. Tartau, A. Gârlea (Cazacu), M. Badescu, V. Melnig, *Preparation, characterization and in vivo biocompatibility study of nano-vesicles encapsulating a nonsteroidal anti-inflammatory drug*, Innovation Through Nanotechnology and Nanomaterials – Post Satellite to the 46th EUROTOX Meeting, International Congress Center Dresden, Saxony, Germany, 22-24 aprilie 2010. (poster)
 35. D. Bindar, A. Gârlea (Cazacu), L. Tartau, A. Chiriac, V. Melnig, *Acetaminophen entrapped in soft matter vesicles design based on nociceptive model in mice effects correlation*, The 2nd International Conference on Polymers Processing in Engineering, Galati, Romania, October 22 – 23, 2009. (oral)
 36. D. Bindar, A. Gârlea (Cazacu), L. Tartau, A. Chiriac, V. Melnig, *Effects of acetaminophen soft matter vesicles carrier in a somatic pain model in mice*, Simpozionului Național de Biomateriale „Biomateriale și Aplicații Medico-Chirurgicale”, Bucuresti, Romania, 21 – 22 Octombrie, 2009. (poster)
 37. D. Bindar, A. Gârlea (Cazacu), L. Tartau, V. Melnig, *Design of magnesium chloride soft vehicle carrier*, 12th International Magnesium Symposium, Iasi, Romania, 22-25 septembrie 2009. (poster)
 38. D. Bindar, A. Gârlea (Cazacu), L. Tartau, A. Chiriac, L. Nita, V. Melnig, *Soft vesicle carrier containing magnesium chloride self-assemble characterization*, NanoRomania International Workshop, Iasi, Romania, 2-5 iunie 2009. (poster)
 39. R. V. Lupusoru, A. Gârlea (Cazacu), C. E. Lupusoru, L. Tartau, V. Melnig, *The controlled drug delivery systems study of chitosan-acetaminophen nanostructured matrices*, 2nd European Conference for Clinical Nanomedicine, Basel, Switzerland, 27 – 29 aprilie 2009. (poster)
 40. V. Melnig, A. Gârlea (Cazacu), M. I. Popa, *The proposed chitosan-acetaminophen nanostructured matrices as controlled drug delivery systems without side effects*, 1st International Congress on Side Effects in Medicine, Iasi, Romania, 19-22 martie 2009. (oral)
 41. A. Gârlea (Cazacu), V. Melnig, M. I. Popa, G. Lisa, *Optimization of chitosan-polyphenols nanostructured matrices as drug delivery systems*, 3rd International Conference Biomaterials & Medical Devices BiomMedD'2008, Bucharest, Romania, 13-16 noiembrie 2008. (poster)
 42. A. Gârlea (Cazacu), V. Melnig, M. I. Popa, *Chitosan Based Nanostructure Self-Assembling Matrices as Drug Delivery Sistems*, 4th International Conference on Materials Science and Condensed Matter Physics, Chisinau, Moldova, 23 – 26 septembrie 2008. (poster)
 43. A. Gârlea (Cazacu), D. Pricop, V. Melnig, M. I. Popa, *Paracetamol Nanocontainers Obtained in Cationic Polymer-Surfactant Self-Assembling Matrices*, 8th International Conference on Physics of Advanced Materials, Iasi, Romania, 4-7 iunie 2008. (poster)
 44. A. Gârlea (Cazacu), V. Melnig, M. I. Popa, G. Rusu, *Tannic acid as polyphenol model entrapped in chitosan based*

nanostructure matrices, The 1st International Conference on Polymers Processing in Engineering, Galati, Romania, 25-26 octombrie 2007. (oral)

45. A. Gârlea (Cazacu), A. Manole, M. I. Popa, V. Melnig, *Matrici nanostructurate chitosan – surfactant utilizate pentru faza suport de nanocontainere cu polifenoli*, VIth International Conference “Biomaterials and Medical-Surgical Applications”, Cluj-Napoca, Romania, 18-20 octombrie 2007. (oral)
46. V. Melnig, L. Obreja, A. Gârlea (Cazacu), M. Cazacu, *Water – soluble polyamidehydroxyurethane biocompatible properties*, International Conference on Fundamental and Applied Research in Physics, FARPhys2005, Iasi, Romania, 26-29 octombrie 2005. (poster)
47. V. Tura, V. Melnig, L. Obreja, A. Gârlea (Cazacu), M. S. Neculaiasa, G. Ciobanu, L. Hristian, *Characterization of Polyurethane Membranes and Films Degraded in Water*, The 1st International Conference on Biomaterials "Biomaterials & Medical Devices" BiomMedD'2004, Romanian Society for Biomaterials, Bucharest, Romania, 5-7 noiembrie 2004. (poster)

13. Prezentări la conferințe științifice naționale

1. O. A. Condurache, A. M. Hanganu, C. E. Ciomaga, A. Cazacu, L. Mitoseriu, *Preparation and electrical characterization of Multiwall Carbon Nanotubes - chitosan nanocomposites*, A XLIII – a Conferință Națională „Fizica și tehnologiile educaționale moderne”, Iași, Romania, 16-17 Mai 2014. (poster)
2. L. Budeanu, A. Cazacu, L. Tartau, V. Melnig, *Highlighting the distribution possibility of silver nanoparticles orally administered to rats*, A XLI – a Conferință Națională „Fizica și tehnologiile educaționale moderne”, Iasi, Romania, 19 mai 2012. (oral)
3. A. Cazacu, D. Pricop, L. Budeanu, V. Melnig, *Gold-chitosan functionalized nanoparticles stability study at room temperature*, A XI-a Conferință Națională de Biofizică, cu participare internațională, Sibiu, Romania, 10-12 noiembrie 2011. (oral)
4. D. Pricop, A. Cazacu, L. Budeanu, L. Ursu, M. Pintilie, L. Tartau, V. Melnig, *Optical activity enhancement of gold nanoparticles functionalized with chitosan via visible irradiation treatment*, A XI-a Conferință Națională de Biofizică, cu participare internațională, Sibiu, Romania, 10-12 noiembrie 2011. (oral)
5. L. Budeanu, D. Pricop, A. Cazacu, V. Melnig, *The confirmation of silver nanoparticles dissolution by UV-Vis spectroscopy correlated with Mie simulation*, A XI-a Conferință Națională de Biofizică, cu participare internațională, Sibiu, Romania, 10-12 noiembrie 2011. (oral)
6. A. Cazacu, L. Ursu, D. Pricop, L. Hriteu, S. Marius, V. Melnig, *Silver nanoparticles plasmon – resonant applications in biological microscopy*, Conferința Națională de Fizică, Iasi, Romania, 23-25 septembrie 2010. (poster)
7. V. Melnig, L. Obreja, A. Gârlea (Cazacu), D. Bindar, *Quantum nanoparticles effects used for biological applications*, Conferința Națională de Biofizică, Cluj-Napoca, Romania, 1-3 octombrie 2009. (oral)
8. D. Bindar, L. Tartau, A. Gârlea (Cazacu), L. Nita, V. Melnig, *Effects of magnesium soft matter vesicles carrier on the behavioral manifestations in mice*, Conferința Națională de Biofizică, Cluj-Napoca, Romania, 1-3 octombrie 2009. (poster)
9. A. Gârlea (Cazacu), A. Manole, M. I. Popa, V. Melnig, *Nanostructured chitosan - surfactant matrices as polyphenols nanocontainers template*, Simpozionul Național de Biomateriale “Biomateriale și Aplicații Medico-Chirurgicale”, Cluj-Napoca, Romania, 18-20 Octombrie, 2007. (oral)
10. A. Gârlea (Cazacu), M. Cazacu, M. I. Popa, V. Melnig, *Ibuprofen/Ketoprofen Entrapment in Chitosan Based Vesicle Carrier*, Conferința Națională de Biofizică, Bucuresti, Romania, 11-14 mai 2007. (oral)
11. M. Cazacu, A. Gârlea (Cazacu), L. Obreja, V. Pohoata, V. Melnig, *Fluorescence Spectroscopy on a Practical Level*, A XXXV – a Conferință Națională “Fizica și Tehnologiile Educaționale Moderne”, Iasi, Romania, 26-27 mai 2006. (oral)
12. M. Cazacu, A. Gârlea (Cazacu), L. Obreja, V. Melnig, *Biocompatible behaviour of water – soluble polyamidehydroxyurethane*, Al V-lea Simpozion Național de Biomateriale „Biomateriale și Aplicații Medico-Chirurgicale”, Iasi, Romania, 28-29 octombrie 2005. (poster)
13. V. Melnig, L. Obreja, A. Gârlea (Cazacu), *In vitro degradation and erosion of degradable lactate segmented polyurethanes*, 8th Romanian Biophysics Conference with international participation, Iasi, Romania, 26-28 mai 2005. (oral)
14. V. Melnig, A. Gârlea (Cazacu), L. Obreja, *Effect of soft-segment chemistry on polyurethane biocompatibility*, 8th Romanian Biophysics Conference with international participation, Iasi, Romania, 26-28 mai 2005. (poster)

15. A. Gârlea (Cazacu), L. Obreja, R. Merfea, D. O. Dorohoi, V. Melnig, *Inverse Problems of Vibro-Rotational Spectra of Polyatomic Molecules*, Conferința Națională de Fizică Aplicată, Iasi, Romania, 4 decembrie 2004. (oral)
16. A. Gârlea (Cazacu), L. Obreja, M. Pascu, D. Raileanu, V. Tura, V. Melnig, *Investigation of in water degraded of polyurethane*, Workshop on Fundamental and Applied Research in Physics, FARPhys, Iasi, Romania, 30 octombrie 2004. (poster)
17. A. Gârlea (Cazacu), V. Pohoata, G. Singurel, V. Melnig, *Anisotropy Fluorescence Study of polyurethane Films*, Simpozionul Științific Anual Probleme Actuale și de perspectivă în Horticultură – Universitatea de Științe Agricole și Medicină Veterinară “Ion Ionescu de la Brad”, Iasi, Romania, 28 mai 2004. (oral)
18. A. Gârlea (Cazacu), V. Pohoata, G. Singurel, V. Melnig, *Fluorescence anisotropy characterization of polymers*, A XXIII – a Conferință Națională “Fizica și Tehnologiile Educaționale Moderne”, Iasi, Romania, 15 mai 2004. (poster)
19. L. Curecheriu, E. L. Obreja, A. Gârlea (Cazacu), C. Campeanu, M. Campeanu, V. Tura, M. O. Apostu, V. Melnig, *Dynamic Analyses of Macrovoid Formation in Polymer/Solvent/Non-Solvent Sistem by Flow-Visualization Method*, Sesiunea Științifică “Cercetări Fundamentale si Aplicative în Domeniul Fizicii”, Universitatea “Alexandru Ioan Cuza”, Iasi, Romania, 1 noiembrie 2003. (poster)
20. C. Ciobanu, L. C. Ciobanu, M. O. Apostu, V. Tura, V. Melnig, A. Gârlea (Cazacu), D. O. Dorohoi, *Dichroic ratio-stretching degree correlations at polyurethan derivatives thin sheets*, Simpozionul Științific Anual Probleme Actuale și de perspectivă în Horticultură – Universitatea de Științe Agricole și Medicină Veterinară “Ion Ionescu de la Brad”, Iasi, Romania, 30 mai 2003. (oral)

14. Citări (fără auto-citări)

Lucrare citată: Bodale, I.; Mihalache, G., Achitei, V., Teliban, G.-C., Cazacu, A., Stoleru, V., *Evaluation of the nutrients uptake by tomato plants in different phenological stages using an electrical conductivity technique*, *Agriculture*, 11(4), 292, 2021. Impact Factor: **2.925** (2020).

1. Alfosea-Simón M., Simón-Grao S., Zavala-Gonzalez E. A., Navarro-Morillo I., Martínez-Nicolás J. J., Alfosea-Simón F. J., Simón I., García-Sánchez F., Ionomics, metabolic and hormonal characterization of the phenological phases of different tomato genotypes using omics tools, *Scientia Horticulturae*, 293, 2022, 110697, ISSN 0304-4238, <https://doi.org/10.1016/j.scienta.2021.110697> FI: 3.463 (2020)

Lucrare citată: Lipșa F., Ursu E.L., Ursu C., Ulea E., Cazacu A., *Evaluation of the antifungal activity of gold-chitosan and carbon nanoparticles on Fusarium Oxysporum*, *Agronomy*, 10(8), 1143, 2020. FI: 3.417.

1. Hassanisaadi, M., Barani, M., Rahdar, A. et al., Role of agrochemical-based nanomaterials in plants: biotic and abiotic stress with germination improvement of seeds, *Plant Growth Regul*, 2022, ISSN 0167-6903. <https://doi.org/10.1007/s10725-021-00782-w> FI: 3.412 (2020)
2. Ramírez-Valdespino C. A., Orrantia-Borunda E., Trichoderma and Nanotechnology in Sustainable Agriculture: A Review, *Frontiers in Fungal Biology*, 2, 61, 2021, ISSN 2673-6128, <https://doi.org/10.3389/ffunb.2021.764675> FI: 0
3. Hossain A., Skalicky M, Brestic M. et al., Application of Nanomaterials to Ensure Quality and Nutritional Safety of Food, *Journal of Nanomaterials*, vol 2021, article ID 9336082, ISSN 1687-4110. <https://doi.org/10.1155/2021/9336082> FI: **2.986** (2020)
4. Yogesh, G.K., Shukla, S., Sastikumar, D., Koinkar, P., Progress in pulsed laser ablation in liquid (PLAL) technique for the synthesis of carbon nanomaterials: a review, *Applied Physics A-Materials Science & Processing*, 127, 810, 2021, ISSN 0947-8396. <https://doi.org/10.1007/s00339-021-04951-6>. FI: **2.584** (2020)
5. A. Juárez-Maldonado, G. Tortella, O. Rubilar, P. Fincheira, A. Benavides-Mendoza, Biostimulation and toxicity: the magnitude of the impact of nanomaterials in microorganisms and plants, *Journal of Advanced Research*, 31, 113-126, 2021, ISSN 2090-1232, <https://doi.org/10.1016/j.jare.2020.12.011>. FI: **10.479** (2020)
6. Picchi, V.; Gobbi, S.; Fattizzo, M.; Zefelippo, M.; Faoro, F. Chitosan Nanoparticles Loaded with N-Acetyl Cysteine to Mitigate Ozone and Other Possible Oxidative Stresses in Durum Wheat, *Plants*, 10(4), 691, 2021. <https://doi.org/10.3390/plants10040691> FI: **3.935** (2020)
7. Francesconi, S.; Steiner, B.; Buerstmayr, H.; Lemmens, M.; Sulyok, M.; Balestra, G.M. Chitosan Hydrochloride Decreases Fusarium graminearum Growth and Virulence and Boosts Growth, Development and Systemic Acquired Resistance in Two Durum Wheat Genotypes. *Molecules* **2020**, 25(20), 4752. ISSN: 1422-0067. <https://doi.org/10.3390/molecules25204752> FI: **4.411**

Lucrare citată: I. Bodale, G.C. Teliban, E.L. Ursu, V. Stoleru, A. Cazacu, *The influence of gold nanoparticles on germination of carrot seeds*, 19th International Multidisciplinary Scientific GeoConference SGEM 2019, 19(6.1), 451-458, 2019, ISSN: 1314-2704. **FI -**

1. Hassanisaadi, M., Barani, M., Rahdar, A. et al., Role of agrochemical-based nanomaterials in plants: biotic and abiotic stress with germination improvement of seeds, *Plant Growth Regul* (2022). ISSN 0167-6903. <https://doi.org/10.1007/s10725-021-00782-w>. **FI: 3.412** (2020)
2. Venzhik, Y.V., Moshkov, I.E., Dykman, L.A., Gold Nanoparticles in Plant Physiology: Principal Effects and Prospects of Application, *Russian Journal of Plant Physiology*, 68(3), 401–412, 2021. ISSN: 1021-4437. <https://doi.org/10.1134/S1021443721020205>. **FI: 1.608** (2020)

Lucrare citată: Galeş, D. C., Trincă, L. C., Cazacu, A., Peptu, C. A., Jităreanu, G., *Effects of a hydrogel on the cambic chernozem soil's hydrophysic indicators and plant morphophysiological parameters*, *GEODERMA*, 267, 102–111, 2016, doi:10.1016/j.geoderma.2015.12.008, ISSN: 0016-7061. Factor de impact: **4.036**.

1. Śpitalniak M, Bogacz A, Zięba Z., The Assessment of Water Retention Efficiency of Different Soil Amendments in Comparison to Water Absorbing Geocomposite, *Materials*, 14(21), 6658, 2021. <https://doi.org/10.3390/ma14216658> **FI: 3.623** (2020)
2. Wu, YN, Yu, MF, Li, YJ, Wu, Y, Shao, ZQ, Liu, YH, Film Properties, Water Retention, and Growth Promotion of Derivative Carboxymethyl Cellulose Materials from Cotton Straw, *Advances in Polymer Technology*, vol. 2021, 5582912, 2021, ISSN 0730-6679, DOI:10.1155/2021/5582912. **FI: 2.389** (2020)
3. Siqi Zhang, Furui He, Xiuqin Fang, Xinyu Zhao, Yuanyuan Liu, Gaobo Yu, Yang Zhou, Yuhong Feng, Jiacheng Li, Enhancing soil aggregation and acetamiprid adsorption by ecofriendly polysaccharides hydrogel based on Ca²⁺- amphiphilic sodium alginate, *Journal of Environmental Sciences*, 113, 55-63, 2022, ISSN 1001-0742, <https://doi.org/10.1016/j.jes.2021.05.042>. **FI: 5.565** (2020)
4. Sumayya; Gull, N; Islam, A; Ghaffar, A; Jabeen, S; Iqbal, SS; Khan, SM; Khan, RU; Hussain, N; Bilal, M, Development and characterization of chitosan and acrylic acid-based novel biodegradable polymeric films for soil conditioning, *International Journal of Biological Macromolecules*, 182, 950-958, 2021, ISSN 0141-8130, DOI: 10.1016/j.ijbiomac.2021.04.098. **FI: 6.953** (2020)
5. Rafael Raul Minosso, Gabriel Luiz Sostisso, João Alexandre Lopes Dranski, Componentes de rendimento e produtividade da soja cultivada com hidrogel, *Revista Científica Rural, Bagé-RS*, 23(1), 69-82, 2021. ISSN: 2525-6912. **FI: -**
6. Gustavo Lazarini Forreque, Aurélio Azevedo Barreto Neto, Evaluation of water-retaining materials made from fruits peels, *Engenharia Sanitaria e Ambiental*, 26(2), 317-325, 2021, ISSN 1413-4152. **FI: -** (2020)
7. Besharati J., Shirmardi M., Meftahizadeh H., Ardakani M. D., Ghorbanpour M., Changes in growth and quality performance of Roselle (*Hibiscus sabdariffa* L.) in response to soil amendments with hydrogel and compost under drought stress, *South African Journal of Botany*, 2021, in press, ISSN 0254-6299, <https://doi.org/10.1016/j.sajb.2021.03.018>. **FI: 1.792** (2019)
8. Vivek MS, Parashuram Chandravanshi, Nataraju SP, Sarvajna Salimath, Kumar Naik AH. Effect of hydrogel on chlorophyll content and chlorophyll stability index of groundnut (*Arachis hypogaea* L.) under rainfed condition, *International Journal of Chemical Studies* 2020;8(3):2211-2215. DOI: 10.22271/chemi.2020.v8.i3af.9539. **FI: -** ????
9. Mazloom N., Khorassani R., Zohury G. H., Emami H., Whalen J., Lignin-based hydrogel alleviates drought stress in maize, *Environmental and Experimental Botany*, 175, 104055, 2020, ISSN 0098-8472, <https://doi.org/10.1016/j.envexpbot.2020.104055>. **FI: 5.545**
10. Saha A., Rattan B., Sekharan S., Manna U., Quantifying the interactive effect of water absorbing polymer (WAP)-soil texture on plant available water content and irrigation frequency, *Geoderma*, 368, 114310, 2020, ISSN 0016-7061, <https://doi.org/10.1016/j.geoderma.2020.114310>. **FI: 6.114**
11. Catariny Cabral Aleman, Flávio Campos Bastos, Automated microsprinkler to determine the crop coefficient in tomato seedling cultivated with hydroretentor, *Journal of Agricultural Science and Technology B*, 8, 507-511, 2018, ISSN: 2161-6264, DOI:10.17265/2161-6264/2018.08.004. **FI: -**
12. Zhang, J., Zhao, T., Sun, B., Song, S., Guo, H., Shen, H., Wu, Y., Effects of biofertilizers and super absorbent polymers on plant growth and soil fertility in the arid mining area of Inner Mongolia, China, *Journal of Mountain Science*, 15(9), 1920–1935, 2018, ISSN: 1672-6316. <https://doi.org/10.1007/s11629-017-4801-5>. **FI: 1.423**
13. Su, A.-Y.; Niu, S.-Q.; Liu, Y.-Z.; He, A.-L.; Zhao, Q.; Paré, P.W.; Li, M.-F.; Han, Q.-Q.; Ali Khan, S.; Zhang, J.-L., Synergistic Effects of *Bacillus amyloliquefaciens* (GB03) and Water Retaining Agent on Drought Tolerance of Perennial Ryegrass, *International Journal of Molecular Sciences*, 18(12), 2651, 2017, ISSN: 1422-0067. **FI: 1.423**

Lucrare citată: Cara, I.G., Trinca, L.C., Trofin, A.E., Cazacu, A, Topa, D., Peptu, C.A., Jitareanu, G., *Assessment of some straw-derived materials for reducing the leaching potential of Metribuzin residues in the soil*, APPLIED SURFACE SCIENCE, 358, 586-594, 2015, doi:10.1016/j.apsusc.2015.08.141, ISSN: 0169-4332. Factor de impact: **3.150**

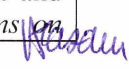
1. Angin, D., Ilci, A, Investigation of the adsorption capacity of olive-waste cake activated carbon for removal of metribuzin from aqueous solutions, *Int. J. Environ. Sci. Technol.*, 2021, ISSN 1735-1472. Early access <https://doi.org/10.1007/s13762-021-03728-x> FI: **2.86** (2020)
2. J. C. S. Golveia, M. F. Santiago, L. B. Silva, . C. Campos, F. Schimidt, Utilization of the Corn cob Agro-Industrial Residue as a Potential Adsorbent in the Biosorption of Bisphenol-A, *J. Braz. Chem. Soc.*, 32(7), 1396-1404, 2021. <https://dx.doi.org/10.21577/0103-5053.20210038>. FI: **1.838** (2020)
3. Hazra D. K., Purkait A., Raghuwanshi D., K Sri Rama Murthy, Method Validation for Quantitative Analysis of Metribuzin in Wheat by Liquid Chromatography–Tandem Mass Spectrometry, *Journal of Chromatographic Science*, 59(1), 47-54, 2021, ISSN:1945-239X, <https://doi.org/10.1093/chromsci/bmaa075> FI: **0** (2020)
4. Cara, IG, Topa, D, Calistru, AE, Motrescu, I, Bulgariu, L, Jitareanu, G, Agri-wastes as a low-cost adsorbent for nicosulfuron herbicide, *Environmental Engineering and Management Journal*, 19(2), 335-343, 2020. FI: **0.916**
5. Li, CS; Zhang, N; Chen, JX; Ji, JW; Liu, X; Wang, JL; Zhu, JH; Ma, YQ, Temperature and pH sensitive composite for rapid and effective removal of sulfonylurea herbicides in aqueous solution, *Environmental Pollution*, 255, 113150, 2019, ISSN: 0269-7491, DOI: 10.1016/j.envpol.2019.113150. FI: **6.793**
6. Tang, F; Li, YY; Zhao, YM; Zhou, Q; Peng, YZ, Enhanced removal of methyl violet using NaOH-modified *C. camphora* leaves powder and its renewable adsorption, *Desalination and Water Treatment*, 98, 306-314, 2017, DOI: 10.5004/dwt.2017.21569. FI: **1.383**
7. Cara, IG, Rusu, BG, Raus, L, Jitareanu, G, Sorption potential of alkaline treated straw and a soil for sulfonylurea herbicide removal from aqueous solutions: An environmental management strategy, *Chemosphere*, 186, 360-366, 2017. DOI: 10.1016/j.chemosphere.2017.07.140, ISSN: 0045-6535. FI: **4.427**
8. Sun, J., Li, H., Feng, L., Jia, Y., Song, Q. and Li, K., A novel treatment of carbon fibers with improving tensile strength to synthesize evenly distributed carbon nanotubes on their surface, *Applied Surface Science*, 403(95–102), 2017. <http://doi.org/10.1016/j.apsusc.2017.01.165> ISSN: 0169-4332. Factor de impact: **4.439**
9. Zhuang, H., Hong, X., Shan, S., Yuan, X., Recycling rice straw derived, activated carbon supported, nanoscaled Fe₃O₄ as a highly efficient catalyst for Fenton oxidation of real coal gasification wastewater, *RSC ADVANCES*, 6(97), 95129-36, 2016, <http://doi.org/10.1039/C6RA20952A>. ISSN: 2046-2069. Factor de impact: **3.108**

Lucrare citată: A. Neagu, L. Curecheriu, M. Airimioaei, A. Cazacu, A. Cernescu, L. Mitoseriu, *Impedance spectroscopy characterization of relaxation mechanisms in gold–chitosan nanocomposites*, COMPOSITES PART B: ENGINEERING, 71, 210–217, 2015, doi:10.1016/j.compositesb.2014.11.038.

1. Strupiechonski E, Moreno-Ríos M, Ávila-Dávila EO, Román-Doval R, Prokhorov E, Kovalenko Y, Zárate-Triviño DG, Medina DI, Luna-Barcenas G, Relaxation Phenomena in Chitosan-Au Nanoparticle Thin Films, *Polymers*, 13(19), 3214, 2021, ISSN 2073-4360. <https://doi.org/10.3390/polym13193214> FI: **4.329** (2020)
2. Ali Atta, Enhanced dielectric properties of flexible Cu/polymer nanocomposite films, *Surface Innovations*, 9(1), 17-24, 2021. ISSN 2050-6252. <https://doi.org/10.1680/jsuin.20.00020>. FI: **3.016** (2020)
3. Erdönmez, S, Karabul, Y, Kılıç, M, Güven Özdemir, Z, Esmer, K. Structural characterization and dielectric parameters of polyindole/WO₃ nanocomposites, *Polymer Composites*, 42(3), 1347-1355, 2020. <https://doi.org/10.1002/pc.25905>. FI: **3.171**
4. V. Chiriac, G. Bulai, L. Curecheriu, I. Topala, N. Dumitrascu, Synthesis and characterization of (co)polymeric films obtained under atmospheric plasma conditions, *Materials Letters*, 264, 127062, 2020, ISSN 0167-577X, <https://doi.org/10.1016/j.matlet.2019.127062>. FI: **3.423**
5. Kocakulah, G., Önsal, G., Köysal, O., Electro-optical and dielectric performance analysis: the influence of azo dye on polymer/LC composite structures, *Applied Physics A*, 125(1), 30, 2019. ISSN: 0947-8396. <https://doi.org/10.1007/s00339-018-2332-8>. FI: **1.810**
6. Kocakulah, G., Önsal, G., Goksen K., Ercan I., Köysal O., Concentration effect of Cadmium Selenide Sulphide/Zinc Sulphide quantum dots on electro-optic and dielectric properties in nematic liquid crystals composite, *Physica B: Condensed Matter*, 550, 47-59, 2018, ISSN 0921-4526. <https://doi.org/10.1016/j.physb.2018.09.012>. FI: **1.874**.

7. Dendisová M., Jenišťová A., Parchaňská-Kokaislová A., Matějka P., Prokopec V., Švecová M., The use of infrared spectroscopic techniques to characterize nanomaterials and nanostructures: A review, *Analytica Chimica Acta*, 1031, 1-14, 2018, ISSN 0003-2670, <https://doi.org/10.1016/j.aca.2018.05.046>. FI: **5.256**
8. I. Turcan, V.A. Lukacs, L. Curecheriu, L. Padurariu, C.E. Ciomaga, M. Airimioaei, G. Stoian, N. Lupu, L. Mitoseriu, Microstructure and dielectric properties of Ag-BaTiO₃ composite ceramics, *Journal of the European Ceramic Society*, 38(16), 5420-5429, 2018, ISSN 0955-2219, <https://doi.org/10.1016/j.jeurceramsoc.2018.08.002>. Factor de impact: **4.029**
9. Abd El-Wahab L. A., Amr El-Hag Ali, R. A. Zaghlool, N. A. Mohsen, Dielectric properties, impedance analysis, and electrical conductivity of Ag doped radiation grafted polypropylene, *Egypt. J. Rad. Sci. Applic.*, 30(1), 95-107, 2017, DOI: [10.21608/ejrsa.2017.1260](https://doi.org/10.21608/ejrsa.2017.1260). FI: -
10. Asadzadeh-Firouzabadi, A., Zare, H.R., An electrochemical nanogenosensor for label based and label free detection of H. Pylori cagE gene and evaluation of DNA damage induced by UVC radiation, *Journal of the Electrochemical Society*, 164(2), B1-B9, 2017. doi:10.1149/2.1471614jes. ISSN: 0013-4651. Factor de impact: **3.662**
11. Saravanan, A., Ramasamy, R.P., Investigation of polymer dynamics in chitosan-maghemite nanocomposites: a potential green superparamagnetic material, *Journal of Polymer Research*, 23,104, 2016, doi:10.1007/s10965-016-0998-1. ISSN: 1022-9760. Factor de impact: **1.615**
12. Safari, S., Van De Ven, T.G.M., Effect of Water Vapor Adsorption on Electrical Properties of Carbon Nanotube/Nanocrystalline Cellulose Composites, *ACS Applied Materials & Interfaces*, 8(14), 9483-9489, 2016, doi:10.1021/acsami.6b02374. ISSN: 1944-8244. Factor de impact: **7.504**
13. Begum, S.N.S., Aswal, V.K., Ramasamy, R.P., Small-Angle Neutron Scattering and Spectroscopic Investigations of Ag Fractal Formation in Chitosan-Ag Nanocomposite Facilitated by Hydrazine Hydrate, *Journal of Physical Chemistry C*, 120(4), 2400-2410, 2016, doi:10.1021/acs.jpcc.5b09747. ISSN: 1932-7447. Factor de impact: **4.536**

Lucrare citată: A. M. Neagu, L. P. Curecheriu, A. Cazacu, L. Mitoseriu, *Impedance analysis and tunability of BaTiO₃-chitosan composites: towards active dielectrics for flexible electronics*, COMPOSITES PART B: ENGINEERING, 66, 109 – 116, 2014, doi:10.1016/j.compositesb.2014.04.020.

1. D. L. Guzmán Sierra, I. Bdkin, A. Tkach, P. M. Vilarinho, C. Nunes, P. Ferreira, Flexible piezoelectric chitosan and barium titanate biocomposite films for sensor applications, *European Journal of Inorganic Chemistry*, 2021(9), 792-803, 2021, ISSN 1434-1948, <https://doi.org/10.1002/ejic.202000938>. Factor de impact: **2.524** (2020)
2. E. Prokhorov, G. L. Bárcenas, B. L. E. Sánchez, B. Franco, F. Padilla-Vaca, M. A. H. Landaverde, J. M. Yáñez Limón, R. A. López, Chitosan-BaTiO₃ nanostructured piezopolymer for tissue engineering, *Colloids and Surfaces B: Biointerfaces*, 196, 2020, 111296, ISSN 0927-7765, <https://doi.org/10.1016/j.colsurfb.2020.111296>. Factor de impact: **5.268**
3. F. E. Bouharras, M. Raihane, B. Ameduri, Recent progress on core-shell structured BaTiO₃@polymer/fluorinated polymers nanocomposites for high energy storage: Synthesis, dielectric properties and applications, *Progress in Materials Science*, 113, 100670, 2020, ISSN 0079-6425, <https://doi.org/10.1016/j.pmatsci.2020.100670>. Factor de impact: **39.58**
4. A. Ashery, S. A. Gad, H. Shaban, Frequency and temperature dependence of dielectric properties and capacitance–voltage in GO/TiO₂/n-Si MOS device, *Applied Physics A-Materials Science & Processing*, 126 (7), 2020, <https://doi.org/10.1007/s00339-020-03729-6>. Factor de impact: **2.584**
5. Declat-Vega, A., Sepúlveda-Ramos, N., Crespo-Montoya, S., Suárez, O. M. (2019). Bio-Composites Reinforced with Strontium Titanate Nanoparticles: Mechanical Behavior and Degradability. *Journal of Composites Science*, 3(1), 7, ISSN 2504-477X. Factor de impact: **0.0**.
6. M. Coşkun, Ö. Polat, F.M. Coşkun, Z. Durmuş, M. Çağlar, A. Türüt, Frequency and temperature dependent electrical and dielectric properties of LaCrO₃ and Ir doped LaCrO₃ perovskite compounds, *Journal of Alloys and Compounds*, 740, 1012-1023, 2018, ISSN 0925-8388, FI: **4.175**. <https://doi.org/10.1016/j.jallcom.2018.01.022>
7. A. Sakthisabarimoorthi, S.A. Martin Britto Dhas, M. Jose, Electrical impedance spectroscopic investigations of monodispersed SiO₂ nanospheres, *Superlattices and Microstructures*, 113, 271 – 282, 2018, ISSN: 0749-6036. FI: **2.385**. <https://doi.org/10.1016/j.spmi.2017.11.001>
8. Declat-Vega, A., Sepúlveda-Ramos, N., Martínez-Santos, J., Suárez, O. M., Study of electrical properties of biocomposites containing ferroelectric nanoparticles, *Journal of Composite Materials*, 51(14), 1979-1985, 2016, doi:10.1177/0021998316665454. ISSN: 0021-9983. Factor de impact: **1.494**
9. L. Wang, F. Gao, K. Zhang, M. Wang, M. Qin, J. Kong, Effect of hot pressing temperature on dielectric and energy storage properties of Ba_{0.6}Sr_{0.4}TiO₃/ poly(vinylidene fluoride) composites, *IEEE Transactions* 

10. Suematsu, K., Arimura, M., Uchiyama, N., Saita, S., Makino, T., Synthesis of BaTiO₃/polymer composite ink to improve the dielectric properties of thin films, *Composites Part B: Engineering*, 104, 80-86, 2016, ISSN 1359-8368, doi:10.1016/j.compositesb.2016.08.011. Factor de impact: **4.727**
11. Airimioaei, M., Stanculescu, R., Preutu, V., Ciomaga, C., Horchidan, N., Tascu, S., Lutic, D., Pui, A., Mitoseriu, L., Effect of particle size and volume fraction of BaTiO₃ powders on the functional properties of BaTiO₃/poly(ϵ -caprolactone) composites, *Materials Chemistry and Physics*, 182, 246-255, 2016, ISSN 0254-0584, doi:10.1016/j.matchemphys.2016.07.029. Factor de impact: **2.084**
12. Ciomaga, C.E., Padurariu, L., Curecheriu, L.P., Lupu, N., Lisiecki, I., Deluca, M., Tascu, S., Galassi, C., Mitoseriu, L., Using multi-walled carbon nanotubes in spark plasma sintered Pb(Zr_{0.47}Ti_{0.53})O₃ ceramics for tailoring dielectric and tunability properties, *Journal of Applied Physics*, 116(16), 164110, 2014, doi:10.1063/1.4900527. ISSN: 0021-8979. Factor de impact: **2.183**

Lucrare citată: A. Cazacu, C. Larosa, P. Beaunier, G. Laurent, P. Nanni, L. Mitoseriu, I. Lisiecki, *Self-organization and/or nanocrystallinity of Co nanocrystals effects on the oxidation process using high-energy electron beam*, ADVANCED FUNCTIONAL MATERIALS, 24(1), 164 – 170, 2014, DOI: 10.1002/adfm.201301465.

1. Liu, JX, Cheng, HF, Bao, JF, Zhang, PF, Liu, MM, Leng, Y, Zhang, ZH, Tao, RM, Liu, J, Zhao, Z, Dai, S, Aluminum hydroxide-mediated synthesis of mesoporous metal oxides by a mechanochemical nanocasting strategy, *Journal of Materials Chemistry A*, 7(40), 22977-22985, 2019, ISSN: 2050-7488. FI: **11.301**
2. Zhang D.J., Jin C.H., Li Z.Y., Zhang Z., Li J.X., Oxidation behavior of cobalt nanoparticles studied by in situ environment transmission electron microscopy, *Science Bulletin*, 62(11), 775–778, 2017, ISSN 2095-9273, <https://doi.org/10.1016/j.scib.2017.05.003> . Factor de impact: **4.136**
3. Philippe Colombar, Nano-optique, céramiques et verres nano-structurés, des pratiques millénaires, Chapter 5 in book: Regards croisés: quand les sciences archéologiques rencontrent l'innovation, Edition: Collection Sciences archéologiques, Publisher: Editions des archives contemporaines, Editors: Marie Balasse, Philippe Dillmann, 97-120, 2017. ISBN 978-2-8130-0242-6.
4. Zheng, H., Wu, S., Sheng, H., Liu, C., Liu, Y., Cao, F., Zhou, Z., Zhao, X., Zhao, D., Wang, J., Direct atomic-scale observation of layer-by-layer oxide growth during magnesium oxidation, *Applied Physics Letters*, 104(14), 141906, 2014, doi:10.1021/cm4039945. ISSN: 0003-6951. Factor de impact: **3.302**

Lucrare citată: A. Cazacu, L. Curecheriu, A. Neagu, L. Padurariu, A. Cernescu, I. Lisiecki, L. Mitoseriu, *Tunable gold-chitosan nanocomposites by local field engineering*, APPLIED PHYSICS LETTERS, 102, 222903 (1–5), 2013; doi:10.1063/1.4809673.

1. Yuan, DD, Yang, RD, Xu, YT, Cai, XF, Enhanced crystallization behaviors and dielectric performance of poly(vinylidene fluoride) film by induced polyamide-1, *High Performance Polymers*, 09540083211031138, 2021, ISSN 0954-0083, <https://doi.org/10.1177/09540083211031138> FI: **2.161** (2020)
2. Vial B., Hao Y., High frequency meta-ferroelectrics by inverse design, *Optical Materials Express*, 11(5), 1457-1469, 2021. ISSN: 2159-3930, <https://doi.org/10.1364/OME.424011>. FI: **3.442** (2020)
3. Lukacs VA, Turcan I., Padurariu L., Curecheriu L., Cernescu A., Stoian G., Ciomaga CE, Tufescu F., Lupu N., Mitoseriu L., Nonlinear dielectric properties of BaTiO₃ - Silver composites: The role of microstructure, *Journal of Alloys and Compounds*, 817, 153336, 2020, ISSN 0925-8388, <https://doi.org/10.1016/j.jallcom.2019.153336>. FI: **5.316**
4. Vial, B., Hao, Y., Enhanced tunability in ferroelectric composites through local field enhancement and the effect of disorder, *Journal of Applied Physics*, 126(4), 044102, 2019, ISSN: 0021-8979, <https://doi.org/10.1063/1.5101053>. FI: **2.286**
5. Li, YZ, Wang, ZJ, Bai, Y, Liu, W, Zhang, ZD., Enhancement of energy storage density in antiferroelectric PbZrO₃ films via the incorporation of gold nanoparticles. *J Am Ceram Soc.*, 102(9), 5253-5261, 2019. ISSN:1551-2916, <https://doi.org/10.1111/jace.16408>. FI: **3.502**
6. I. Turcan, V.A. Lukacs, L. Curecheriu, L. Padurariu, C.E. Ciomaga, M. Airimioaei, G. Stoian, N. Lupu, L. Mitoseriu, Microstructure and dielectric properties of Ag-BaTiO₃ composite ceramics, *Journal of the European Ceramic Society*, 38(16), 5420-5429, 2018, ISSN 0955-2219, <https://doi.org/10.1016/j.jeurceramsoc.2018.08.002>. Factor de impact: **4.029**
7. Dendisová M., Jenišťová A., Parchaňská-Kokaislová A., Matějka P., Prokopec V., Švecová M., The use of infrared spectroscopic techniques to characterize nanomaterials and nanostructures: A review, *Analytica Chimica Acta*, 1031, 1-14, 2018, ISSN 0003-2670, <https://doi.org/10.1016/j.aca.2018.05.046>. FI: **5.256**
8. Curecheriu, L. P., Buscaglia, M.T., Maglia, F., Padurariu, C., Ciobanu, G., Anselmi-Tamburini, U., Buscaglia, V., Mitoseriu, L., Tailoring the functional properties of PLZT-BaTiO₃ composite ceramics by core-shell

- approach, *Journal of Applied Physics*, 121(14), 144101, 2017, doi: 10.1063/1.4979969, ISSN:0021-8979. Factor de impact: **2.176**
9. Toor, A., So, H., Pisano, A.P., Dielectric properties of ligand-modified gold nanoparticle/SU-8 photopolymer based nanocomposites, *Applied Surface Science*, 414, 373–379, 2017, ISSN: 0169-4332, <http://doi.org/10.1016/j.apsusc.2017.04.096>. Factor de impact: **4.439**
 10. Toor, A., So, H., Pisano, A.P., Improved dielectric properties of polyvinylidene fluoride nanocomposite embedded with poly (vinyl pyrrolidone) coated gold nanoparticles, *ACS Applied Materials & Interfaces*, 9 (7), 6369–6375, 2017. Doi:10.1021/acsami.6b13900. ISSN: 1944-8244. Factor de impact: **8.097**
 11. Gheorghiu, F., Padurariu, L., Airimioaei, M., Curecheriu, L., Ciomaga, C., Padurariu, C., Galassi, C., Mitoseriu, L., Porosity-Dependent Properties of Nb-Doped Pb(Zr,Ti)O₃ Ceramics, *Journal of the American Ceramic Society*, 100, 647–658, 2017. doi:10.1111/jace.14587. ISSN: 0002-7820. Factor de impact: **2.956**
 12. Chen, MJ, Ning, XK, Wang, SF, Fu, GS, Enhanced polarization and dielectricity in BaTiO₃:NiO nanocomposite films modulated by the microstructure, *RSC Adv.*, 7(61), 38231-38242, 2017, DOI:10.1039/C7RA06627A. ISSN: 2046-2069. FI: **2.936**
 13. Padurariu, L., Curecheriu, L. P., Mitoseriu, L., Nonlinear dielectric properties of paraelectric-dielectric composites described by a 3D Finite Element Method based on Landau-Devonshire theory, *Acta Materialia*, 103, 724-734, 2016. DOI: 10.1016/j.actamat.2015.11.008. ISSN: 1359-6454. Factor de impact: **5.301**
 14. Ciomaga, C.E., Padurariu, L., Curecheriu, L.P., Lupu, N., Lisecki, I., Deluca, M., Tascu, S., Galassi, C., Mitoseriu, L, Using multi-walled carbon nanotubes in spark plasma sintered Pb(Zr_{0.47}Ti_{0.53})O₃ ceramics for tailoring dielectric and tunability properties, *Journal of Applied Physics*, 116(16), 164110, 2014, doi:10.1063/1.4900527. Factor de impact: **2.183**
 15. T.L. Sa, Z.P. Cao, Y.J. Wang, H.B. Zhu, Enhancement of charge and energy storage in PbZrO₃ thin films by local field engineering, *Applied Physics Letters*, 105(4), 043902, 2014, doi:10.1063/1.4891768. Factor de impact: **3.302**

Lucrare citată: L. Tartau, A. Cazacu, V. Melnig, *Ketoprofen-liposomes formulation for clinical therapy*, JOURNAL OF MATERIALS SCIENCE: MATERIALS IN MEDICINE, 23(10), 2499-2507, 2012; doi:10.1007/s10856-012-4712-5.

1. Râpă M, Gaidau C, Mititelu-Tartau L, Berechet M-D, Berbecaru AC, Rosca I, Chiriac AP, Matei E, Predescu A-M, Predescu C., Bioactive Collagen Hydrolysate-Chitosan/Essential Oil Electrospun Nanofibers Designed for Medical Wound Dressings, *Pharmaceutics*, 2021; 13(11), 1939, ISSN 1999-4923. <https://doi.org/10.3390/pharmaceutics13111939> FI: **6.321** (2020)
2. Mititelu-Tartau L, Bogdan M, Pricop DA, Buca BR, Pauna A-M, Dijmarescu LA, Pelin A-M, Pavel LL, Popa GE. Assessment of the In Vivo Release and Biocompatibility of Novel Vesicles Containing Zinc in Rats. *Molecules*. 2021; 26(13), 4101. <https://doi.org/10.3390/molecules26134101>. ISSN: 1420-3049. FI: **4.411** (2020)
3. Mititelu-Tartau, L.; Bogdan, M.; Pricop, D.A.; Buca, B.R.; Hilitanu, L.; Pauna, A.-M.; Dijmarescu, L.A.; Popa, E.G., Biocompatibility and Pharmacological Effects of Innovative Systems for Prolonged Drug Release Containing Dexketoprofen in Rats, *Polymers*, 13(7), 1010, 2021. ISSN 2073-4360. <https://doi.org/10.3390/polym1307101>. FI: **4.329** (2020)
4. Mititelu Tartau L, Bogdan M, Buca BR, Pauna AM, Tartau CG, Dijmarescu LA, Popa EG. Evaluation of Antinociceptive Effects of Chitosan-Coated Liposomes Entrapping the Selective Kappa Opioid Receptor Agonist U50,488 in Mice. *Medicina*. 2021; 57(2):138. <https://doi.org/10.3390/medicina57020138>. FI: **2.43** (2020)
5. Li, M.; van Raath, M.I.; Khakpour, S.; Seçilir, A.; Sliggers, B.C.; Huang, X.; Ding, B.; Storm, G.; van der Hulst, R.R.; de Kroon, A.I.P.M.; et al. In Vivo Assessment of Thermosensitive Liposomes for the Treatment of Port Wine Stains by Antifibrinolytic Site-Specific Pharmaco-Laser Therapy, *Pharmaceutics*, 12(6), 591, 2020, ISSN 1999-4923. doi:10.3390/pharmaceutics12060591. FI: **6.321**
6. Ramos, P.T., Pedra, N.S., Soares, M.S.P., da Silveira, E.F., Oliveira, P.S., Grecco, F.B., da Silva, L.M.C., Ferreira, L.M., Ribas, D.A., Gehrcke, M. and Felix, A.O.C., Ketoprofen-loaded rose hip oil nanocapsules attenuate chronic inflammatory response in a pre-clinical trial in mice, *Materials Science & Engineering C-Materials for Biological Applications*, 103, 109742, 2019. <https://doi.org/10.1016/j.msec.2019.109742>. ISSN: 0928-4931. Factor de impact: **5.880**
7. Moradkhani MR, Karimi, A, Negahdari, B, Nanotechnology application for pain therapy, *Artificial Cells, Nanomedicine and Biotechnology*, 46(2), 368-373, 2018, doi: 10.1080/21691401.2017.1313265, ISSN: 2169-1401. Factor de impact: **4.462**
8. Alavi, S., Haeri, A., Dadashzadeh, S., Utilization of chitosan-caged liposomes to push the boundaries of therapeutic delivery, *Carbohydrate Polymers*, 157, 991–1012, 2017. doi:10.1016/j.carbpol.2016.10.063. ISSN:

0144-8617. Factor de impact: **5.158**

9. Ferreira, L.M., Sari, M.H., Cervi, V.F., Gehrcke, M., Barbieri, A.V., Zborowski, V.A., Beck, R.C., Nogueira, C.W., Cruz, L., Pomegranate seed oil nanoemulsions improve the photostability and in vivo antinociceptive effect of a non-steroidal anti-inflammatory drug, *Colloids and Surfaces B: Biointerfaces*, 144, 214–221, 2016. doi:10.1016/j.colsurfb.2016.04.008. ISSN: 0927-7765. Impact factor: **3.887**
10. Yadav, N. K., Raghuvanshi, A., Sharma, G., Beg, S., Katare, O. P., Nanda, S., QbD-Based Development and Validation of a Stability-Indicating HPLC Method for Estimating Ketoprofen in Bulk Drug and Proniosomal Vesicular System, *Journal of Chromatographic Science*, 54(3), 377-389, 2016. doi:10.1093/chromsci/bmv151. ISSN 0021-9665. Impact factor: **0.984**
11. Maestrelli, F., Bragagni, M., Mura, P., Advanced formulations for improving therapies with anti-inflammatory or anaesthetic drugs: a review, *Journal of Drug Delivery Science and Technology*, 32(B), 192–205, 2016. doi:10.1016/j.jddst.2015.09.011. ISSN: 1773-2247. Impact factor: **1.194**
12. Park, S., Lee, S.E., Lee, J.K., Kim, T.H., Jang, W.S., Park, J.S., Preparation and physicochemical characterization of ketoprofen-loaded emulsions, *Journal of Pharmaceutical Investigation*, 46(5), 487–493, 2015. doi:10.1007/s40005-016-0247-y. ISSN: 2093-5552. Impact factor: **0**
13. S. Hua, S.Y. Wu, The use of lipid-based nanocarriers for targeted pain therapies, *Frontiers in Pharmacology*, 4, 143, 2013, doi:10.3389/fphar.2013.00143. ISSN: 1663-9812. Factor de impact: **3.941**.

Lucrare citată: A. Gârlea (Cazacu), V. Melnig, M. I. Popa, *Nanostructured chitosan – surfactant matrices as polyphenols nanocapsules template with zero order release kinetics*, JOURNAL OF MATERIALS SCIENCE: MATERIALS IN MEDICINE, 21(4), 1211–1223, 2010, doi:10.1007/s10856-009-3968-x.

1. Riccucci, G, Ferraris, S, Reggio, C, Bosso, A, Orlygsson, G, Ng, CH, Spriano, S, Polyphenols from Grape Pomace: Functionalization of Chitosan-Coated Hydroxyapatite for Modulated Swelling and Release of Polyphenols, *Langmuir*, 37, 51, 14793–14804, 2021, ISSN 0743-7463. Early access <https://doi.org/10.1021/acs.langmuir.1c01930> FI: **3.882** (2020)
2. Ulu, A, Birhanli, E, Ates, B, Tunable and tough porous chitosan/beta-cyclodextrin/tannic acid biocomposite membrane with mechanic, antioxidant, and antimicrobial properties, *International Journal of Biological Macromolecules*, 188, 696-707, 2021. ISSN 0141-8130. <https://doi.org/10.1016/j.ijbiomac.2021.08.068> FI: **6.953** (2020)
3. Guo W., Cai Z.S., Xu Q., Sun K.Y., Huang X.J., Cao Z., Synthesis and Properties of Dehydroabietyl Glycidyl Ether Grafted Hydroxypropyl Chitosan, *BioResources*, 15(2), 2020, 1930-2126. FI: **1.614**
4. Braber NLV, Paredes AJ, Rossi YE, Porporatto C, Allemandi D.A., Borsarelli C.D., Correa S.G., Montenegro M.A., Controlled release and antioxidant activity of chitosan or its glucosamine water-soluble derivative microcapsules loaded with quercetin, *International Journal of Biological Macromolecules*, 112, 399-404, 2018, ISSN: 0141-8130. FI: **4.784**. <https://doi.org/10.1016/j.ijbiomac.2018.01.085>
5. Lupusoru, RV, Simion, L, Sandu, I, Pricop, DA, Chiriac, A, Poroch, V, Aging Study of Gold Nanoparticles Functionalized with Chitosan in Aqueous Solutions, *Revista de Chimie*, 68(10), 2385-2388, 2017. ISSN: 0034-7752. <https://doi.org/10.37358/RC.17.10.5891>. FI: **1.412**.
6. Gao, Z., Zharov, I., Large pore mesoporous silica nanoparticles by templating with a nonsurfactant molecule, tannic acid, *Chemistry of Materials*, 26(6), 2030-2037, 2014. doi:10.1021/cm4039945. ISSN: 0897-4756. Factor de impact: **8.354**
7. He, X., Li, X., Bao, H.J., Wang, R.W., Liu, Y.D., Song, S.W., Effects of three-dimensional spheroid culture system on biological characteristics of mouse bone marrow mesenchymal stem cells, *Chinese Journal of Tissue Engineering Research*, 18(45), 7227-7232, 2014. doi:10.3969/j.issn.2095-4344. ISSN 2095-4344. FI: -
8. Stefan M., Melnig V., Pricop D., Neagu A., Mihasan M., Tartau L., Hritcu L., Attenuated effects of chitosan-capped gold nanoparticles on LPS-induced toxicity in laboratory rats, *Materials Science and Engineering C - Materials for Biological Applications*, 33(1), 550-556, 2013. doi:10.1016/j.msec.2012.09.031. ISSN: 0928-4931. Factor de impact: **2.736**
9. Huang, C., Yang, J.D., Feng, X.M., Li, G.F., Li, Y.N., Xiao, H.X., Sun, Y., Neuron-like differentiation of mesenchymal stem cells induced by quaternary chitosan thermosensitive hydrogel scaffolds combined with glial cell line-derived neurotrophic factor, *Chinese Journal of Tissue Engineering Research*, 17(42), 7420-7426, 2013. doi:10.3969/j.issn.2095-4344.2013.42.013. ISSN 2095-4344. FI: -
10. Rahman, Z., Zidan, A.S., Berendt, R.T., Khan, M.A., Tannate complexes of antihistaminic drug: Sustained release and taste masking approaches, *International Journal of Pharmaceutics*, 422(1-2), 91-100, 2012, doi:10.1016/j.ijpharm.2011.10.033. ISSN: 0378-5173. Factor de impact: **3.458**
11. Wu, Q.H., Qiu, L., Li, M.Y., Liu, Y., Tian, X.F., Concentration and adhesion of bone marrow mesenchymal stem cells on chitosan scaffolds, *Journal of Clinical Rehabilitative Tissue Engineering Research*, 15(8), 1369-1372, 2011. ISSN 1673-8225. doi:10.3969/j.issn.1673-8225.2011.08.009. FI: -

Lucrare citată: A. Gârlea (Cazacu), V. Melnig, M. I. Popa, G. Rusu, *Entrapment of tannic acid in chitosan based nanostructure matrices*, MATERIALE PLASTICE, 45(2), 193-197, 2008, ISSN: 0025-5289.

1. Kritchenkov, A. S., Egorov, A. R., Dubashynskaya, N. V., Volkova, O. V., Zabodalova, L. A., Suchkova, E. P., Kurliuk, A. V., Shakola, T. V., Dysin, A. P., Natural polysaccharide-based smart (temperature sensing) and active (antibacterial, antioxidant and photoprotective) nanoparticles with potential application in biocompatible food coatings, *International journal of biological macromolecules*, 134, 480-486, 2019. ISSN 0141-8130. <https://doi.org/10.1016/j.ijbiomac.2019.04.194>. Factor de impact: **5.162**
2. Ignat G., Colibaba C., Costuleanu C.L., Moraru I., Vintu C.R., Ungureanu G., Bejinariu C., Studies Regarding the Efficiency of Grape Tannins Greening Plastics, *Materiale Plastice*, 54(3), 586-588, 2017. FI: **1.248**
3. Ignat, G, Balan, G, Sandu, I, Costuleanu, CL, Ville, STS, Study of Phenolic Compounds in Merlot Red Wines Obtained by Different Technologies, *Revista de Chimie*, 67(8), 1560-1565, 2016. FI: **1.232**.

Lucrare citată: V. Melnig, A. Gârlea (Cazacu), L. Obreja, *Effect of soft-segment chemistry on polyurethane biocompatibility*, JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS, 8(3), 1302-1307, 2006.

1. Ates, B., Koytepe, S., Karaaslan, M.G., Balcioglu, S., Gulgen, S., Demirbilek, M., Denkbaz, E.B., Chlorogenic Acid Containing Bioinspired Polyurethanes: Biodegradable Medical Adhesive Materials, *International Journal of Polymeric Materials and Polymeric Biomaterials*, 64(12), 611-619, 2015. ISSN: 0091-4037. doi:10.1080/00914037.2014.996710. Factor de impact: **1.667**
2. Gungor, O., Pasahan, A., Cengiz, M.A., Koytepe, S., Seckin, T., Fructose-based polyurethane membranes: synthesis, characterization, and their use as voltammetric pH electrode, *International Journal of Polymeric Materials and Polymeric Biomaterials*, 64(11), 563-569, 2015. ISSN: 0091-4037. doi:10.1080/00914037.2014.996705. Factor de impact: **1.667**
3. Gao, R.L., Zhang, M.Q., Dixit, N., Moore, R.B., Long, T.E., Influence of ionic charge placement on performance of poly(ethylene glycol)-based sulfonated polyurethanes, *Polymer*, 53(6), 1203-1211, 2012, doi:10.1016/j.polymer.2012.01.043. ISSN: 0032-3861. Factor de impact: **3.379**

Lucrare citată: V. Melnig, V. Pohoata, L. Obreja, A. Gârlea (Cazacu), M. Cazacu, *Water-soluble polyamidhydroxyurethane swelling behaviour*, JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS, 8(3), 1040-1043, 2006.

1. L. Hritcu, M. Stefan, L. Ursu, A. Neagu, M. Mihasan, L. Tartau, V. Melnig, Exposure to silver nanoparticles induces oxidative stress and memory deficits in laboratory rats, *Central European Journal of Biology*, 6(4), 497-509, 2011, doi:10.2478/s11535-011-0022-z. ISSN: 1895-104X. Factor de impact: **1.000**
2. V. Melnig, L. Ursu, Poly(amidehydroxyurethane) template magnetite nanoparticles electrosynthesis: I. Electrochemical aspects and identification, *Journal of Nanoparticle Research*, 13(6), 2509-2523, 2011, doi:10.1007/s11051-010-0144-7. ISSN: 1388-0764. Factor de impact: **3.287**
3. M. Stefan, L. Hritcu, M. Mihasan, D. Pricop, I. Gostin, R.I. Olariu, S. Dunca, V. Melnig, Enhanced antibacterial effect of silver nanoparticles obtained by electrochemical synthesis in poly(amidehydroxyurethane) media, *Journal of Materials Science-Materials in Medicine*, 22(4), 789-796, 2011, doi:10.1007/s10856-011-4281-z. ISSN: 0957-4530. Factor de impact: **2.316**
4. Stefan, M., Hritcu, L., Obreja, L., Melnig, V., Synthesis and antibacterial effect of silver nanoparticles with different sizes, *Analele Stiintifice ale Universitatii „Alexandru Ioan Cuza” din Iasi Sec. Genetica si Biologie Moleculara*, 11(1), 99-106, 2010. ISSN: 2248-3276. Factor de impact: -
5. V. Melnig, M.-O. Apostu, N. Foca, Cadmium Selenide Nanoparticles Synthesis in Water-Soluble Polymer System, *Materiale Plastice*, 46(3), 274-278, 2009. Factor de impact: **0.000**
6. C. Hincu, R.V. Lupusoru, L. Obreja, A. Balan, L. Tartau, C.R. Ionescu, C.E. Lupusoru, C.E. Cotrutz, M. Badescu, V. Melnig, Polyamidehydroxyurethane capped magnetite nanoparticles characterization, *Knowledge Based Organization International Conference*, 6, 393-398, 2009. ISSN 1843-6722. Factor de impact: **0.000**
7. R.V. Lupusoru, L. Obreja, A. Balan, L. Tartau, C.M. Ghiciuc, C.R. Ionescu, C.E. Lupusoru, C.E. Cotrutz, M. Badescu, V. Melnig, Magnetite nanoparticles effects in laboratory animals, *Knowledge Based Organization International Conference*, 6, 399-403, 2009. ISSN 1843-6722. Factor de impact: **0.000**
8. L. Obreja, D.-O. Dorohoi, V. Melnig, N. Foca, A. Nastuta, Poly(amidehydroxyurethane) Templated Fe₃O₄ and Ag Nanoparticles Galvanostatic Assay Synthesis, *Materiale Plastice*, 45(3), 261-264, 2008. Factor de impact: **0.873**
9. V. Melnig, M.-O. Apostu, N. Foca, Polymer-assisted synthesis of water-soluble PbSe quantum dots, *Journal of Nanoparticle Research*, 10(1), 171-177, 2008, doi:10.1007/s11051-008-9449-1. ISSN: 1388-0764. Factor de impact: **0.000**

Lucrare citată: V. Melnig, L. Obreja, A. Gârlea (Cazacu), *In vitro degradation and erosion of degradable lactate segmented polyurethanes*, JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS, 7(6), 2803-2808, 2005, ISSN 1454-4164.

1. Visan, A. L., Belforte, G., A Model Analysis and Validation of a Pneumatic Muscle Made from Advanced Materials, *Applied Mechanics and Materials*, 245, 241-246, 2013. ISSN: 1662-7482. <https://doi.org/10.4028/www.scientific.net/AMM.245.241>. Factor de impact: -
2. Rusu, E., Airinei, A., Some investigations on films of poly(vinyl alcohol) with pendant p-azidobenzoate groups, *Optoelectronics and Advanced Materials-Rapid Communications*, 2(12), 886-890, 2008. ISSN: 1842-6573. Factor de impact: **0.224**
3. Manole, A. V., Melnig, V., Zonda, R., Vacareanu, C., Chiper, S. A., *In vitro* evaluation of platelet adhesion on polyurethane films and membranes, *Romanian Journal of Biophysics*, 18(1), 29-37, 2008. ISSN: 1220-515X. Factor de impact: -
4. Lupu, M., Butnaru, M., Macocinschi, D., Oprean, O.Z., Dimitriu, C., Bredetean, O., Zagnat, M., Ioan, S., Surface properties of segmented poly(ester urethane)s and evaluation of in vitro blood compatibility and in vivo biocompatibility, *Journal of Optoelectronics and Advanced Materials*, 9(11), 3474-3478, 2007. ISSN: 1454-4164. Factor de impact: **0.827**
5. Rusu, E., Airinei, A., Barboiu, V., Timpu, D., Some characteristics of poly(vinyl alcohol) with azido aromatic groups, *Journal of Optoelectronics and Advanced Materials*, 9(4), 1044-1047, 2007. ISSN: 1454-4164. Factor de impact: **0.827**
6. Oprea, S., Vlad, S., Polyurethane materials for passive isolation bearings, *Journal of Optoelectronics and Advanced Materials*, 8(2), 675-681, 2006. ISSN: 1454-4164. Factor de impact: **1.106**

Lucrare citată: A. Cazacu, D. Pricop, L. Tartău, L. Hrițcu, M. Ștefan, L. Niță, C. Ionescu, V. Nica, G. Rusu, M. Dobromir, V. Melnig, *Effect on nerve structures of functionalized gold-chitosan nanoparticles obtained by one pot synthesis*, Analele Științifice ale Universității Alexandru Ioan Cuza Iași, secțiunea Genetică și Biologie Moleculară, Tom XII, Fasc 1, 45-50, 2011, ISSN 1582-3571.

1. Fratoddi I., Venditti I., Cametti C., Russo M. V., How toxic are gold nanoparticles? The state-of-the-art, *Nano Research*, 8(6), 1771-1799, 2015. doi:10.1007/s12274-014-0697-3. ISSN: 1998-0124. Factor de impact: **8.893**
2. Czechowska-Biskup, R., Rokita, B., Ulanski, P., Rosiak, JM, Preparation of gold nanoparticles stabilized by chitosan using irradiation and sonication methods, *Progress on Chemistry and Application of Chitin and its Derivative*, 20, 18-33, 2015, ISSN: 1896-5644, DOI: 10.15259/PCACD.20.02. FI: **0,000**
3. M. Ștefan, V. Melnig, D. Pricop, A. Neagu, M. Mihasan, L. Tartau, L. Hritcu, Attenuated effects of chitosan-capped gold nanoparticles on LPS-induced toxicity in laboratory rats, *Materials Science and Engineering C - Materials for Biological Applications*, 33(1), 550-556, 2013. doi:10.1016/j.msec.2012.09.031. ISSN: 0928-4931. Factor de impact: **2.736**

Lucrare citată: D. Bindar, L. Tartau, A. Gârlea (Cazacu), L. Nita, V. Melnig, *Effects of magnesium soft matter vesicles carrier on the behavioral manifestations in mice*, ROMANIAN JOURNAL OF BIOPHYSICS, 20(1), 23-35, 2010, ISSN 1220-515X.

1. Silva, D., R. Arancibia, C. Tapia, C. Acuña-Rougier, M. Diaz-Dosque, M. Cáceres, J. Martínez, P. C. Smith, Chitosan and platelet-derived growth factor synergistically stimulate cell proliferation in gingival fibroblasts, *Journal of Periodontal Research*, 48(6), 677-686, 2013. doi:10.1111/jre.12053. ISSN: 0022-3484. Factor de impact: **2.215**
2. Tamba, B. I., M. M. Leon, T. Petreus, Common trace elements alleviate pain in an experimental mouse model, *Journal of Neuroscience Research*, 91(4), 554-561, 2013. doi:10.1002/jnr.23191. ISSN: 0360-4012. Factor de impact: **2.729**
3. Tartău L., Lușoror E.C., Ciubotariu D., Melnig, V., Acute toxicity investigation and the effects of original magnesium nanovesicles on the memory processes performance in rats, *Therapeutics, Pharmacology and Clinical Toxicology*, 16(1), 2012. ISSN 2066-0170. Factor de impact: -

Lucrare citată: A. Gârlea (Cazacu), M. I. Popa, V. Pohoata, V. Melnig, *Ibuprofen/Ketoprofen Entrapment in Chitosan Based Vesicle Carrier*, ROMANIAN JOURNAL OF BIOPHYSICS, 17(3), 157-168, 2007, ISSN: 1220-515X.

1. Hilitanu, LN, Mititelu-Tartau, L, Popa, GE, Buca, BR, Pavel, LL, Pelin, AM, Meca, AD, Bogdan, M, Pricop, DA, The Analysis of Chitosan-Coated Nanovesicles Containing Erythromycin-Characterization and Biocompatibility in Mice, *ANTIBIOTICS-BASEL*, 10(12), 1471, 2021. ISSN: 2079-6382. FI: 4.639 (2020)
2. Mititelu-Tartau L, Bogdan M, Pricop DA, Buca BR, Pauna A-M, Dijmarescu LA, Pelin A-M, Pavel LL, Popa GE. Assessment of the In Vivo Release and Biocompatibility of Novel Vesicles Containing Zinc in Rats. *Molecules*. 2021; 26(13), 4101. <https://doi.org/10.3390/molecules26134101>. ISSN: 1420-3049. FI: **4.411** (2020)
3. Mititelu-Tartau, L.; Bogdan, M.; Pricop, D.A.; Buca, B.R.; Hilitanu, L.; Pauna, A.-M.; Dijmarescu, L.A.; Popa, E.G., Biocompatibility and Pharmacological Effects of Innovative Systems for Prolonged Drug Release Containing Dexketoprofen in Rats, *Polymers*, 13(7), 1010, 2021. ISSN 2073-4360. <https://doi.org/10.3390/polym1307101>. FI: **3.426** (2020)
4. Mititelu Tartau L, Bogdan M, Buca BR, Pauna AM, Tartau CG, Dijmarescu LA, Popa EG. Evaluation of Antinociceptive Effects of Chitosan-Coated Liposomes Entrapping the Selective Kappa Opioid Receptor Agonist U50,488 in Mice. *Medicina*. 2021; 57(2):138. <https://doi.org/10.3390/medicina57020138>. FI: **1.205** (2020)
5. Mititelu-Tartau, L., Popa, G., Pricop, D., Lupusoru, R. V., Lupusoru, C. E., Experimental researches on the effects of soft matter vesicles entrapping zinc in cognitive processes in rats, *European Neuropsychopharmacology*, 24(2), S291, 2014. ISSN: 0924-977X. Factor de impact: **4.369**
6. Boancă, M., Popa, E. G., Lupuşoru, R. V., Porocho, V., Mititelu-Tarţău, L., Lupuşoru, C. E., The effects of magnesium nanovesicle formulations on spatial memory performance in mice, *Revista medico-chirurgicala a Societatii de Medici si Naturalisti din Iasi*, 118(3), 847-853, 2014. ISSN:0048-7848. Factor de impact: -
7. Shokuhfar, T., Sinha-Ray, S., Sukotjo, C., Yarin, A. L., Intercalation of anti-inflammatory drug molecules within TiO₂ nanotubes, *RSC Adv.*, 3(38), 17380-17386, 2013. doi:10.1039/c3ra42173b. ISSN: 2046-2069. Factor de impact: **3.708**
8. Tartau, L., Lupusoru, C. E., Diana, C., Melnig, V., Acute toxicity investigation and the effects of original magnesium nanovesicles on the memory processes performance in rats, *Therapeutics, Pharmacology and Clinical Toxicology*, 16(1), 2012. ISSN 2066-0170. Factor de impact: -
9. Tartau, L., Lupusoru, C. E., Sindrilar, E. V., Melnig, V., Experimental researches on the effects of magnesium soft matter vesicles on spatial learning and memory in rats, *European Neuropsychopharmacology*, 21, S338, 2011. ISSN: 0924-977X. Factor de impact: **4.046**
10. Tartau, L., Lupusoru, R. V., Andritoiu, C., Melnig, V., Experimental researches on the effects of tramadol soft matter vesicles in nociceptive processes in mice, *Annals of the Romanian Society for Cell Biology*, 16(1), 2011. ISSN: 1583-6258. Factor de impact: -
11. Tartau, L., Bindar, D., Melnig, V., The effects of ketoprofen and dexketoprofen soft matter vesicles in an experimental pain model in mice, *European Neuropsychopharmacology*, 20, S276, 2010. ISSN: 0924-977X. Factor de impact: **4.201**
12. Tartau, L., Sindrilar, V., Melnig, V., The effects of variation in magnesium soft matter vesicles dosage on behavioural manifestation in rats, *European Neuropsychopharmacology*, 20, S259, 2010. ISSN: 0924-977X. Factor de impact: **4.201**
13. Tarţău, L., Lupusoru, R. V., Bindar, D., Melnig, V., Experimental research on the effects of nano-vesicles encapsulating ketoprofen in a visceral pain model in mice, *Therapeutics, Pharmacology and Clinical Toxicology*, 14(2), 2010. ISSN 2066-0170. Factor de impact: -
14. Tarţău, L., Lupuşoru, C. E., Bindar, D., Melnig, V., Biocompatibility investigation and *in vivo* evaluation of ketoprofen entrapped in lipid vesicles, *Annals of the Romanian Society for Cell Biology*, 15(2), 2010. ISSN: 1583-6258. Factor de impact: -

15. Premii obținute

1. „Bronze Medal” pentru cartea „Perspective moderne în fertirigarea legumelor din spații protejate”, Iași, Ed. „Ion Ionescu de la Brad, Iași, 2020, autori V. Stoleru (coordonator), N. Munteanu, I. Țenu, T. Stan, V. Muraru, G. Teliban, A. Cojocaru, I. Bodale, A. Cazacu, G. Mihalache, M. Gheorghiuoiaie, V. Achiței, C. Pereș – Euroinvent Book Salon (22 mai 2021)
2. Premiul I obținut la Simpozionul Internațional „Universul Științelor” – Ediția a III-a, Iași, Romania, 8 septembrie 2012 pentru lucrarea: A. Cazacu, Studiul efectului de plasmon de suprafață rezonant al nanoparticulelor de aur în chitosan.
3. Premiu acordat pentru cea mai bună lucrare la The 1st International Conference on Polymers Processing in Engineering, Galati, Romania, 25-26 octombrie 2007: A. Garlea (Cazacu), V. Melnig, M. I. Popa, G. Rusu, Tannic acid as polyphenol model entrapped in chitosan based nanostructure matrices.
4. Premiu acordat tinerilor cercetători pentru cel mai bun poster la A 8-a Conferință Națională de Biofizică cu

participare internațională, Iasi, Romania, 26-28 mai 2005: V. Melnig, A. Garlea (Cazacu), L. Obreja, Effect of soft-segment chemistry on polyurethane biocompatibility.

5. Premiul SRB'2005 – secțiunea "Postere" la Al V-lea Simpozion Național de Biomateriale, „Biomateriale și Aplicații Medico-Chirurgicale”, Iasi, Romania, 28-29 octombrie 2005: M. Cazacu, A. Garlea (Cazacu), L. Obreja, V. Melnig, Biocompatible behaviour of water – soluble polyamidehydroxyurethane.

16. Lucrări premiate

1. Premiu CNCSIS: A. Gârlea (Cazacu), V. Melnig, M. I. Popa, G. Rusu, Entrapment of tannic acid in chitosan based nanostructure matrices, MATERIALE PLASTICE, 45(2), 193-197, 2008, ISSN: 0025-5289.
2. Premiu CNCSIS: A. Gârlea (Cazacu), A. Manole, M. I. Popa, V. Melnig, 2009, Chitosan-paracetamol nanostructure self-assembling matrices as drug delivery systems, MATERIALE PLASTICE, 46(4), 356-362, 2009, ISSN: 0025-5289
3. Premiu CNCSIS: A. Gârlea (Cazacu), V. Melnig, M. I. Popa, Nanostructured chitosan – surfactant matrices as polyphenols nanocapsules template with zero order release kinetics, JOURNAL OF MATERIALS SCIENCE: MATERIALS IN MEDICINE, 21(4), 1211–1223, 2010; DOI 10.1007/s10856-009-3968-x, ISSN: 0957-4530.
4. Premiu CNCSIS: L. Tartau, A. Cazacu, V. Melnig, Ketoprofen-liposomes formulation for clinical therapy, JOURNAL OF MATERIALS SCIENCE: MATERIALS IN MEDICINE, 23(10), 2499-2507, 2012; DOI: 10.1007/s10856-012-4712-5, ISSN: 0957-4530.
5. Premiu CNCSIS: A. Cazacu, L. Curecheriu, A. Neagu, L. Padurariu, A. Cernescu, I. Lisiecki, L. Mitoseriu, Tunable gold-chitosan nanocomposites by local field engineering, APPLIED PHYSICS LETTERS, 102, 222903 (1 – 5), 2013; doi: 10.1063/1.4809673, ISSN: 0003-6951.
6. Premiu CNCSIS: A. Cazacu, C. Larosa, P. Beaunier, G. Laurent, P. Nanni, L. Mitoseriu, I. Lisiecki, Self-organization and/or nanocrystallinity of Co nanocrystals effects on the oxidation process using high-energy electron beam, ADVANCED FUNCTIONAL MATERIALS, 24(1), 164 – 170, 2014, DOI: 10.1002/adfm.201301465, ISSN: 1616-3028.
7. Premiu CNCSIS: A. M. Neagu, L. P. Curecheriu, A. Cazacu, L. Mitoseriu, 2014, Impedance analysis and tunability of BaTiO₃-chitosan composites: towards active dielectrics for flexible electronics, COMPOSITES PART B: ENGINEERING, 66, 109 – 116, doi:10.1016/j.compositesb.2014.04.020, ISSN: 1359-8368.
8. Premiu CNCSIS: A. Neagu, L. Curecheriu, M. Airimioaei, A. Cazacu, A. Cernescu, L. Mitoseriu, Impedance spectroscopy characterization of relaxation mechanisms in gold–chitosan nanocomposites, COMPOSITES PART B: ENGINEERING, 71, 210–217, 2015, doi:10.1016/j.compositesb.2014.11.038, ISSN: 1359-8368.
9. Premiu CNCSIS: Cara, IG, Trinca, LC, Trofin, AE, Cazacu, A., Topa, D, Peptu, CA, Jitareanu, G, Assessment of some straw-derived materials for reducing the leaching potential of Metribuzin residues in the soil, APPLIED SURFACE SCIENCE, 358, 586-594, 2015, doi: 10.1016/j.apsusc.2015.08.141, ISSN: 0169-4332.
10. Premiu CNCSIS: Galeș, D. C., Trincă, L. C., Cazacu, A., Peptu, C. A., Jităreanu, G., Effects of a hydrogel on the cambic chernozem soil's hydrophysic indicators and plant morphophysiological parameters, GEODERMA, 267, 102–111, 2016, doi:10.1016/j.geoderma.2015.12.008, ISSN: 0016-7061.
11. Premiu CNCSIS: Lipșa F., E.-L. Ursu, C. Ursu, E. Ulea, A. Cazacu*, *Evaluation of the antifungal activity of gold - chitosan and carbon nanoparticles on Fusarium Oxysporum*, Agronomy-Basel, 10(8), 1143, 2020. ISSN 2073-4395. <https://doi.org/10.3390/agronomy10081143>

10.01.2022