

## LISTA PUBLICAȚIILOR REZULTATE ÎN URMA CERCETĂRII ȘTIINȚIFICE DIN PROGRAMUL DE STUDII DOCTORALE

Nume: Anisie

Prenume: Alexandru

### 1. Lucrări publicate în reviste cotate ISI

1. Anisie, A., Bostanaru, A.-C., Mares, M. & Marin, L. (2021) Imination of chitosan nanofibers in a heterogeneous system. synthesis optimization and impact on fiber morphology. *Cellulose Chemistry and Technology* 55(7-8),785-793. 10.35812/CelluloseChemTechnol.2021.55.65 F.I.= 1.3
2. Anisie, A., Rosca, I., Sandu, A.-I., Bele, A., Cheng, X., & Marin, L. (2022) Imination of Microporous Chitosan Fibers—A Route to Biomaterials with "On Demand" Antimicrobial Activity and Biodegradation for Wound Dressings. *Pharmaceutics*, 14(1), 117. <https://doi.org/10.3390/pharmaceutics14010117> F.I. = 5.4
3. Anisie, A., Oancea, F. & Marin, L. (2023) Electrospinning of chitosan-based nanofibers: from design to prospective applications. *Reviews in Chemical Engineering* 39 (1), 31-70. <https://doi.org/10.1515/revce-2021-0003> F.I. = 4.7
4. Anisie, A., Andreica, B.-I., Mititelu-Tartau, L., Coman, G. C., Bilyy, R., Bila, G., Rosca, I., Sandu, A.-I., Amler, E. & Marin, L. (2023) Biodegradable trimethyl chitosan nanofiber mats by electrospinning as bioabsorbable dressings for wound closure and healing. *International Journal of Biological Macromolecules* 249, 126056, <https://doi.org/10.1016/j.ijbiomac.2023.126056> F.I. = 8.2
5. Ailincăi, D., Cibotaru, S., Anisie, A., Coman, C. G., Pasca, A. S., Rosca, I., ... & Marin, L. (2023). Mesoporous chitosan nanofibers loaded with norfloxacin and coated with phenylboronic acid perform as bioabsorbable active dressings to accelerate the healing of burn wounds. *Carbohydrate Polymers*, 121135. 10.1016/j.carbpol.2023.121135 F.I. = 11.2
6. Bejan, A., Anisie, A., Andreica, B.-I., Rosca, I., Marin, L., Chitosan nanofibers encapsulating copper oxide nanoparticles: a new approach towards multifunctional ecological membranes with high antimicrobial and antioxidant efficiency. *International Journal of Biological Macromolecules - trimis spre publicare* F.I. = 8.2

### 2. Patente

1. „Nețesută de chitosan cu co-eliberare controlată de antibiotic și principii active”, Luminita Marin, Alexandru Anisie, Ailincăi Daniela, Sandu Cibotaru, Bianca Andreica, Irina Rosca, număr înregistrare CBI : A / 00478 / 08.08.2022
2. „Procedeu de electrofilare de nanofibre de chitosan și chitosan/chitosan cuaternizat”, Luminita Marin, Alexandru Anisie, Bianca Andreica, Liliana Mititelu Tarțău , număr înregistrare CBI : A / 00749 / 21.11.2022

### Lucrări proceeding

1. Anisie, A., Rosca, I. & Marin, L. (2020) Functionalized Chitosan Nanofibers with Enhanced Antimicrobial Activity for Burn Wound Healing Applications. *Proceedings of the First International Conference on "Green" Polymer Materials*, doi:10.3390/CGPM2020-07216

**3. Lucrări publicate în reviste cotate ISI (rezultate care nu sunt incluse în teză)**

1. Marin, L., Popa, M., Anisie, A., Irimiciuc, S.-A., Agop, M., Petrescu, T.-C., Vasincu, D., & Himiniuc, L. (2021). A Theoretical Model for Release Dynamics of an Antifungal Agent Covalently Bonded to the Chitosan. *Molecules*, 26(7), 2089. <https://doi.org/10.3390/molecules26072089> F.I. = 4.6
2. Lungu, R., Anisie, A., Rosca, I., Sandu, A.-I., Ailincăi, D., & Marin, L. (2021). Double functionalization of chitosan based nanofibers towards biomaterials for wound healing. *Reactive and Functional Polymers*, 167, 105028. <https://doi.org/10.1016/j.reactfunctpolym.2021.105028> F.I. = 5.1
3. Serbezeanu, D., Vlad-Bubulac, T., Onofrei, M. D., Doroftei, F., Hamciuc, C., Ipate, A.-M., Anisie, A., Lisa, G., Anghel, I., Șofran, I.-E., & Popescu, V. (2022). Phosphorylated Poly(vinyl alcohol) Electrospun Mats for Protective Equipment Applications. *Nanomaterials*, 12(15), 2685. <https://doi.org/10.3390/nano12152685> F.I. = 5.3
4. Andreica, B.-I., Anisie, A., Rosca, I., Sandu, A.-I., Pasca, A. S., Tartau, L. M., & Marin, L. (2023). Quaternized chitosan/chitosan nanofibrous mats: An approach toward bioactive materials for tissue engineering and regenerative medicine. *Carbohydrate Polymers*, 302, 120431. <https://doi.org/10.1016/j.carbpol.2022.120431> F.I. = 11.2.
5. Marin, L., Andreica, B.-I., Anisie, A., Cibotaru, S., Bardosova, M., Materon, E. M., & Oliveira, O. N. (2023). Quaternized chitosan (nano)fibers: A journey from preparation to high performance applications. *International Journal of Biological Macromolecules*, 242, 125136. <https://doi.org/10.1016/j.ijbiomac.2023.125136> F.I. = 8.2
6. Andreica, B.-I., Anisie, A., Iftime, M., Ababei, R.-V., Ochiuz, L., Vasincu, D., Vasilache, I.-A., Volovat, C., Boboc D., Poroch, V., Eva, L., Agop, M., Scripcariu, D.-V., Volovat S.R., Swelling and biodegradation profile of chitosan/quaternized chitosan nanofibers in media mimicking wound exudate. A theoretical model – experimental approach, *Pharmaceutics* -trimis spre publicare F.I. = 8.2

**4. Doctorandul mulțumește următoarelor proiecte pentru suportul acordat:**

1. Eco-nanomateriale bazate pe chitosan pentru aplicații de interes contemporan (ECOMAT), PN-III-P4-ID-PCE-2020-2717
2. Bandaj resorbabil cu eliberare controlată de norfloxacin pentru vindecarea arsurilor (BurnHeal), PN-III-P2-2.1-PED-2019-5071
3. Pansamente pentru vindecarea inteligentă a rănilor (SWORD), PN-III-P3-3.6-H2020-2020-0138
4. Smart Wound Monitoring Restorative Dressings (SWORD), H2020-MSCA-RISE-2019: (no. 873123)
5. Innovative Electrospun Membranes based on Phosphorus-containing Polymers for Protective Clothing (InElPHoPro), PN-III-P1-1.1-TE-2019-0639
6. New "green" technology for advanced water treatment based on functionalized polysulfones/ionic liquids membranes (GreenTechMembr), PN-III-P2-2.1-PED-2019-301

**5. Participări la sesiuni științifice naționale și internaționale  
Comunicări orale**

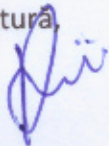
1. Anisiei, A., Rosca, I., Marin, L., (2020) Iminoboronate-chitosan nanofibers with antimicrobial activity for burn wound healing applications, *Open door to the future scientific communications of young researchers MacroYouth, Iasi, Romania.*
2. Anisiei, A., Rosca, I., Marin, L., (2020) Functionalized chitosan nanofibers with enhanced antimicrobial activity for burn wound healing applications *The First International Conference on "Green" Polymer Materials .*
3. Anisiei, A., Rosca, I., Sandu, A.-I., Bele, A., Marin, L., (2021) Biodegradable imino-chitosan nanofibers as wound dressing materials *macroyouth Open door to the future scientific communications of young researchers MacroYouth Second Edition Iasi, Romania.*
4. Anisiei, A., Andreica, B.-I., Marin, L., (2022) Chitosan based nanofibers for wound dressing applications *XXXII<sup>nd</sup> edition of the International Congress of "Apollonia" University of Iasi, , Iasi, România.*
5. Anisiei, A., Andreica, B.-I., Marin, L.,(2022) Biodegradable chitosan/quaternized chitosan nanofibers as wound dressings *12th International Conference On Materials Science & Engineering (BRAMAT),Braşov, România.*
6. Cibotaru S., Ailincăi D., Anisiei A., Marin L.,(2022) Bandages based on chitosan nanofibers for burn healing applications, *12th International Conference on Materials Science and Engineering, Brasov, Romania.*
7. Marin L, Ailincăi D., Iftime M.-M., Craciun A.-M., Bejan A., Anisiei A., Andreica B.-I., (2022) Chitosan imination: an opportunity towards biomaterials with broad application spectrum, *7th International Congress on Biomaterials and Biosensors (BIOMATSEN 2022), Muğla, Turkey.*
8. Marin L, Ailincăi D., Cibotaru S., Anisiei A., Rosca I., Mititelu-Tartau L., (2022) Biodegradable chitosan based nanofibers with broad spectrum antimicrobial activity for wound healing applications, *EPF European Polymer Federation, Prague, Czech Republic.*
9. Marin L, Anisiei A. , Andreica B.I. , Mititelu-Tartau L. , Coman C. , Bilyy R., Bila G. , Rosca I. , Sandu A.I. , Amler E. (2023) Quaternized chitosan based nanofibers as bioabsorbable wound dressings, *The 14th International Conference of the European Chitin Society (EUCHIS 2023) and the 15th International Conference on Chitin and Chitosan (15th ICCS), Siglufjörður, Iceland*
10. Bejan A., Anisiei A., Marin L., (2023) Chitosan/quaternized chitosan – based nanofibers mesh as promising materials for air filtration, *The 14th International Conference of the European Chitin Society (EUCHIS 2023) and the 15th International Conference on Chitin and Chitosan (15th ICCS), Siglufjörður, Iceland*
11. Anisiei A., Bejan A., Marin L., (2023) Copper oxide nanoparticle-doped nanofiber mats for effective air filtration, *8th EPNOE International Polysaccharides Conference, Graz, Austria.*
12. Marin L, Anisiei A. , Andreica B.I. , Mititelu-Tartau L. , Coman C. , Bilyy R., Bila G. , Rosca I. , Sandu A.I. , Amler E. (2023) Nanofibers based on quaternized chitosan as bioabsorbable wound dressings, *8th EPNOE International Polysaccharides Conference, Graz, Austria.*
13. Ailincăi D. , Cibotaru S. , Anisiei A. , Rosca I. , Mititelu-Tartau L. , Marin L. (2023) Chitosan nanofibers for burn healing applications, *8th EPNOE International Polysaccharides Conference, Graz, Austria.*

#### **Prezentare de postere**

1. Anisiei, A., Andreica, B.-I., Marin, L., (2022) Electrospinning of chitosan/quaternary salts of chitosan nanofibers for biomedical application. *EPF European Polymer Congress, Praga, Republica Cehă.*

2. Anisie, A., Rosca, I., Sandu, A.-I., Bele, A., Marin, L., (2022) Imination of chitosan fibers towards potential antimicrobial wound dressings EPF European Polymer Congress, Praga, Republica Cehă.
  3. Lungu R., Anisie A., Rosca I., Sandu A.-I., Ailincăi D., Marin L., (2021) Double-functionalized chitosan nanofibers for wound healing, Progress in Organic and Macromolecular Compounds, 28th Edition, Iasi, Romania
  4. Cibotaru S., Ailincăi D., Anisie A., Marin L., (2022) Drug delivery systems based on imino-chitosan nanofibers for burn healing applications, EPF European Polymer Federation 2022, Prague, Czech Republic.
  5. Andreica B.-I. , Anisie A. Rosca I. , Sandu A.-I. , Mititelu-Tartau L. , Marin L., (2023) Chitosan/quaternized chitosan nanofibers designed for biomedical applications, 8th EPNOE International Polysaccharides Conference, Graz, Austria.
  6. Anisie A., Bejan A., Cibotaru S. \*, Marin L. Quaternized chitosan nanofibers for bone regeneration, 8th EPNOE International Polysaccharides Conference, Graz, Austria.
- 6. Mobilități desfășurate pe parcursul stagiului de doctorat:**
1. InoCure, Praga, Republica Cehă, sub îndrumarea Dr. Evzen Amler  
15.10.-15.12.2022

Semnătura



Aviz,

Conducător de doctorat

