



ANEXA 6

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

Nume: **Bianca-Iulia**  
Prenume: **Ciubotaru**

### 1. *Lucrări publicate:*

- în reviste cotate ISI (Web of Science cu factor de impact);

#### *Articole ISI publicate în cadrul tezei:*

1. **B.-I. Ciubotaru**, M.-F. Zaltariov, M. Dascalu, A. Bele, A. Bargan, M. Cazacu. Amino-functionalized silicones processed as porous dual covalent/supramolecular networks for pressure sensing. *Reactive and Functional Polymers* (2024) 105792. (FI = 5.1), (Q1).

2. M.-F. Zaltariov, **B.-I. Ciubotaru**, A. Ghilan, D. Peptanariu, M. Ignat, M. Iacob, N. Vornicu, M. Cazacu. Mucoadhesive Mesoporous Silica Particles as Versatile Carriers for Doxorubicin Delivery in Cancer Therapy. *International Journal of Molecular Sciences* (2023) 24(19), p.14687. (FI = 5.6), (Q2).

3. M.-F. Zaltariov, M. Turtoi, D. Peptanariu, A.-M. Măcsim, L. Clima, C. Cojocaru, N. Vornicu, **B.-I. Ciubotaru**, A. Bargan, M. Calin, M. Cazacu, Chemical Attachment of 5-Nitrosalicylaldimine Motif to Silatrane Resulting in an Organic–Inorganic Structure with High Medicinal Significance, *Pharmaceutics* (2022) 14, 2838 <https://doi.org/10.3390/pharmaceutics14122838> (FI = 5.4), (Q2).

4. **B.-I. Ciubotaru**, M. Dascalu, M.-F. Zaltariov, A.-M. Măcsim, M. Damoc, A. Bele, C. Tugui, C.D. Varganici, M. Cazacu, Catalyst-free crosslinked sustainable functional silicones by supramolecular interactions, *Reactive and Functional Polymers* (2022) 181, 105419 <https://doi.org/10.1016/j.reactfunctpolym.2022.105419> (FI = 5.1), (Q1).

5. **B.-I. Ciubotaru**, M.-F. Zaltariov, C. Tugui, E. Stoleru, D. Peptanariu, G. Stiubianu, N. Vornicu, M. Cazacu, Silicones with different crosslinking patterns: Assessment from the perspective of their suitability for biomaterials, *Surfaces and Interfaces* (2022) 32, 102168, <https://doi.org/10.1016/j.surfin.2022.102168>. F.I. =6.2, (Q1).

#### *Articole ISI ale căror rezultate nu sunt incluse în teză :*

1. Gradinaru, I., **Ciubotaru, B.-I.**, Butnaru, M., Cojocaru, F.D., Covașă, C.T., Bibire, T., Dascalu, M., Bargan, A., Cazacu, M. and Zaltariov, M.F., 2023. The Impact of the Addition of Vitamins on a Silicone Lining Material to the Oral Mucosa Tissue—Evaluation of the Biocompatibility, Hydrolytic Stability and Histopathological Effect. *Medicina*, 59(11), p.1936.

2. Gradinaru, I., Vasiliu, A.L., Bargan, A., Checherita, L.E., **Ciubotaru, B.I.**, Armencia, A.O., Istrate, B., Dascalu, C.G. and Antohe, M.E., 2023. The Influence of Beverages on Resin Composites: An In Vitro Study. *Biomedicines*, 11(9), p.2571.
3. I. Gradinaru, A. L. Vasiliu, A. Bargan, **B.-I. Ciubotaru**, A. O. Armencia, L. L. Hurjui, L. E. Checheriță, C. G. Dascalu, M.-E. Antohe, Evaluation of the behaviour of dental composites related to different types of drinks by the dynamic vapor sorption method, *Romanian Journal of Oral Rehabilitation*, Vol. 15, no. 2, pp. 328 – 335, 2601-4661.
4. I. Grădinaru, **B-I Ciubotaru**, M. Dascălu, Preliminary study concerning the adaptation of a periodontal dressing material to the inclusion of therapeutic agents, *Archives of Metallurgy and Materials*, accepted for publication
5. D. Filip, D. Macocinschi, M.-F. Zaltariov, **B.-I. Ciubotaru**, A. Bargan, C.-D. Varganici, A.-L. Vasiliu, D. Peptanariu, M. Balan-Porcarasu, M.-M. Timofte-Zorila, Hydroxypropyl Cellulose/Pluronic-Based Composite Hydrogels as Biodegradable Mucoadhesive Scaffolds for Tissue Engineering, *Gels.*, 8, 519 (2022), <https://doi.org/10.3390/gels8080519>
6. G.-T. Stiubianu, A. Bele, M. Grigoras, C. Tugui, **B.-I. Ciubotaru**, M.-F. Zaltariov, F. Borza, L.-G. Bujoreanu, M. Cazacu, Scalable Silicone Composites for Thermal Management in Flexible Stretchable Electronics, *Batteries.*, 8(8), 95 (2022), <https://doi.org/10.3390/batteries8080095>
7. **B.-I. Ciubotaru**, M.-F. Zaltariov, C. Tugui, E. Stoleru, D. Peptanariu, G. Stiubianu, N. Vornicu, M. Cazacu, Silicones with different crosslinking patterns: Assessment from the perspective of their suitability for biomaterials, *Surf. Interfaces.*, 32, 102168 (2022), <https://doi.org/10.1016/j.surfin.2022.102168>
8. D. Filip, D. Macocinschi, M.-F. Zaltariov, C.A. Gafitanu, C.G. Tuchilus, A. Bele, **B.-I. Ciubotaru**, E. Stoleru, A. Bargan, Mucoadhesive and Antimicrobial Allantoin/ $\beta$  Cyclodextrins-Loaded Carbopol Gels as Scaffolds for Regenerative Medicine, *Gels*, 8(7), 416 (2022), <https://doi.org/10.3390/gels8070416>
9. C. Racles, M. Asandulesa, V. Tiron, C. Tugui, N. Vornicu, **B.-I. Ciubotaru**, M. Mičušík, M. Omastov' a, A. L. Vasiliu, C. Ciomaga, Elastic Composites with PDMS matrix and Polysulfone-Supported Silver Nanoparticles as Filler, *Polymer* 217 (2021) 123480, <https://doi.org/10.1016/j.polymer.2021.123480>
10. Spiridon, I.; Andrei, I.-M.; Anghel, N.; Dinu, M.V.; **Ciubotaru, B.-I.** Development and Characterization of Novel Cellulose Composites Obtained in 1-Ethyl-3-methylimidazolium Chloride Used as Drug Delivery Systems. *Polymers* 2021, 13, 2176. <https://doi.org/10.3390/polym13132176>
11. Spiridon, I.; Anghel, N.; Dinu, M.V.; Vlad, S.; Bele, A.; **Ciubotaru, B.I.**; Verestiuc, L.; Pamfil, D. Development and Performance of Bioactive Compounds-Loaded Cellulose/Collagen/Polyurethane Materials, *Polymers* 2020, 12, 1191. <https://doi.org/10.3390/polym12051191>
12. D. Macocinschi, D. Filip, **B.-I. Ciubotaru**, R.P. Dumitriu, C.-D. Varganici, M.-F. Zaltariov, Blends of sodium deoxycholate-based poly(ester ether)urethane ionomer and hydroxypropylcellulose with

mucosal adhesiveness, *International Journal of Biological Macromolecules* 162 (2020) 1262–1275, <https://doi.org/10.1016/j.ijbiomac.2020.06.191>

13. I. Grădinaru, **B.-I. Ciubotaru**, M.F. Zaltariov, An Attenuated Total Reflectance study of different alginate impression materials used in dental medicine, *The Medical-Surgical Journal*, 2020, 4 (124).

14. M.-F. Zaltariov, **B.-I. Ciubotaru**, L. Vereștiuc, D. Peptanariu, D. Macocinschi, D. Filip, Ruthenium (II) complexes with cytotoxic activity embedded in hydroxypropyl methylcellulose/sodium alginate mucoadhesive hydrogels, *Cellulose Chemistry and Technology*, Volume 53, Issue 9-10 September-December, p. 869-878

15. N. Anghel, S. Lazăr, **B.-I. Ciubotaru**, L. Vereștiuc, I. Spiridon, New cellulose-based materials as transdermal transfer systems for bioactive substances, *Cellulose Chemistry and Technology*, Volume 53, Issue 9-10 September-December, p.879-884

- în volume ale conferințelor (ISI web of Knowledge);

I. Grădinaru, **B.-I. Ciubotaru**, M.-F. Zaltariov and M. Cazacu, Comparative Study on the Characteristics of Silicone Elastomers used in Dental Impression Techniques, *IOP Conference Series Materials Science and Engineering*, July 2020, DOI: 10.1088/1757-899X/877/1/012036

## 2. *Capitole de carte*

M.-F. Zaltariov, **B.-I. Ciubotaru**, M. Savin, D. Filip, D. Macocinschi, Bio-Based Polymers For Liposomal Drug Formulations In book: *Applications of Biodegradable and Bio-Based Polymers for Human Health and a Cleaner Environment*, Nov 2021, Apple Academic Press, partnered with CRC Press, a member of the Taylor & Francis Group, ISBN: 9781771889766, DOI: 10.1201/9781003146360-5

## 3. *Comunicări la conferințe naționale sau internaționale*

### *Comunicări:*

1. I. Grădinaru, **B.-I. Ciubotaru**, M. Dascălu, Preliminary study concerning the adaptation of a periodontal dressing material to the inclusion of therapeutic agents, *EUROINVENT ICIR 2023*, International Conference on Innovative Research, Iasi, 11th–12st of May 2023

2. I. Grădinaru, A. Bargan, **B.-I. Ciubotaru**, Dynamic Vapour Sorption Analysis in the Preliminary Evaluation of Silicone Impression Materials, *The 11th IEEE International Conference on E-Health and Bioengineering - EHB 2023*, Grigore T. Popa University of Medicine and Pharmacy Iasi, November 9-10, 2023, Bucharest, Romania

3. I. Gradinaru, **B.-I. Ciubotaru**, M. Dascălu, A. Bargan, A.-L. Vasiliu, Alginate dental impression materials with Allantoin enrichment: a morphology, dynamic vapor sorption and swelling evaluation, IEEE E-HEALTH AND BIOENGINEERING CONFERENCE - EHB 10-th edition, Iași, Romania, November 17-19, 2022
4. M.-F. Zaltariov, A. Bargan, D. Peptanariu, C. Cojocar, **B.-I. Ciubotaru**, M. Cazacu, Bioactive and biodegradable silatranes as potential functional entities for nanoplatforms of biomedical relevance, Congresul Internațional al Universității Apollonia „Pregătim viitorul, promovând excelența”, Iași, România, 28 februarie - 2 martie 2022
5. **B.-I. Ciubotaru**, C. Țugui, M. Cazacu, N. Vornicu, M.-F. Zaltariov, Silicone materials-from cultural heritage conservation to biomedical applications, Conferința științifică internațională PATRIMONIUL CULTURAL DE IERI –IMPLICAȚII ÎN DEZVOLTAREA SOCIETĂȚII DURABILE DE MÂINE, CULTURAL HERITAGE OF YESTERDAY – CONTRIBUTION TO THE DEVELOPMENT OF A SUSTAINABLE SOCIETY OF TOMORROW, ediția a V-a, Iași-Chișinău, 22 Februarie 2022
6. I. Gradinaru, **B.-I. Ciubotaru** and A.-L.Vasiliu, A Morphological and Structural Study of Four Elastomeric Impression Materials Used in Dental Medicine, IEEE E-HEALTH AND BIOENGINEERING CONFERENCE - EHB 2021, 9-th edition, Iași, Romania, November 18-19, 2021
7. **B.-I. Ciubotaru**, M. Cazacu, Evaluation of silicone-based biomaterials from the bio- and mucoadhesive perspective, MacroYouth, SESIUNEA DE COMUNICĂRI ȘTIINȚIFICE A TINERILOR CERCETĂTORI POARTĂ DESCHISĂ SPRE VIITOR, 19 Noiembrie 2020, Iași, România
8. **B.-I. Ciubotaru**, I. Gradinaru, M.-F. Zaltariov, M. Cazacu, Comparative study on the characteristics of silicone synthetic elastomers used in dental impression techniques; International Conference on Innovative Research - ICIR EUROINVENT 2020, Iasi, Romania, 21-22 Mai, 2020
9. **B.-I. Ciubotaru**, M.-F. Zaltariov, M. Cazacu, C. Racles, Functionalized mesoporous silica in drug delivery and biomedical applications; Congresul Internațional al Universitatii “Apollonia” Editia a XXX-a „Pregătim viitorul promovând excelența”,Iași, România, 27 februarie – 1 martie 2020
10. **B.-I. Ciubotaru**, M.-F. Zaltariov, C. Racles, M. Cazacu, Functionalized mesoporous silica as carrier for controlled delivery of doxorubicin; „ZILELE SPITALULUI CLINIC C.F. IASI” 2019 - PERFORMANTA Stiintei – STIINTA PERFORMANTEI, Iasi, Romania, 22-27 octombrie 2019
11. L. Verestiuc, **B.-I. Ciubotaru**, Smart Mucoadhesive Polymeric Biomaterials for Medical /Pharmaceutical Applications and in Vitro Models for Their Evaluation. In: ICNMBE: International conference on Nanotechnologies and Biomedical Engineering: proc. of the 4rd intern. conf., Sept. 18-21: Program & Abstract Book, 2019. Chișinău, 2019, p. 112. ISBN 978-9975-72-392-3

**Postere:**

1. **B.-I. Ciubotaru**, A. Bargan, G. Știubianu, M. Dascălu, A.-M. Macsim, A. Bele, A. Soroceanu, The development and characterization of new membranes based on polysulfone and silsesquioxanes with perspectives in environmental applications, 112th International Conference on Environmental Engineering and Management (ICEEM), 13-16 September 2023, Iași, Romania

2. **B.-I. Ciubotaru**, M. Dascălu, A. Bele, M.-F. Zaltariov, Functional silicone elastomers efficiently crosslinked through supramolecular interactions without catalyst, 10th European Silicon Days, Montpellier, France, 10-12 July 2023

3. G. Știubianu, **B.-I. Ciubotaru**, M. Dascalu, A. Bele, V. Tiron, Solvent-free silicone-based elastomers with self-healing capabilities by supramolecular interactions, Annual Polymer Day, Lyngby, Denmark, 30 Septembrie 2022

4. A. Bele, M. Dascalu, G. Știubianu, **B.-I. Ciubotaru**, V. Carlescu, V. Tiron, I. Burducea, A. Pandele, Silicone-based modular artificial sensing skin for MMOD impact damage detection and evaluation system in spacecraft, International Exhibition of Inventions INVENTICA, Iași, România, 22 – 24.06.2022

5. **B.-I. Ciubotaru**, M.-F. Zaltariov, C. Racles, M. Cazacu, Preparation and application of mesoporous silica for pH-controlled delivery of doxorubicin, Zilele Universității „Alexandru Ioan Cuza” din Iași Conferința FACULTĂȚII DE CHIMIE IasiChem 2019, 31 Octombrie – 01 Noiembrie, 2019

**4. Alte mențiuni**

**Cursuri suplimentare în domenii conexe:**

**B.-I. Ciubotaru**, e-SPACE Heart Failure 2023, EBAC Cert-ID: 2023-EPN-9741000-000, 10 CME credits, Course Director Prof. Stefan D. Anker, October 20-21, 2023

**B.-I. Ciubotaru**, Proiectarea activităților de cercetare în studii europene: documentare, metode și diseminare (C5), organizat de Centrul de Studii Europene, Facultatea de Drept – Universitatea “Al. I. Cuza” din Iași, în cadrul proiectului Jean Monnet Module on EU Interdisciplinary Studies: Widening Knowledge for a more Resilient Union EURES-621262-EPP-1-2020-1-RO-EPPJMO, Coordonator proiect- Cercet. (II) dr. Ramona Țigănașu, Iași, Iulie 2021

**Stagii și mobilități:**

Taras Shevchenko National University of Kyiv, Ucraina, 28.08.2021-27.10.2021, stagiul de cercetare în cadrul proiectului H2020-MSCA-RISE-2016, SPINSWITCH No 734322

**Proiecte de cercetare:**

1. Mimarea mecanismelor viului prin abordări ale chimiei supramoleculare, în cinci dimensiuni - 5D-nanoP, PN-III-P4-ID-PCCF-2016-0050, Contract nr. 4/2018, Proiect al Ministerului Cercetării și Inovației, CNCS – UEFISCDI, PNCDI III - Programul 4, Proiecte Complexe de Cercetare de Frontieră –

2016, Contractor: Institutul de Chimie Macromoleculară "Petru Poni", Iași, România, Academia Română, membru în echipă în perioada 2019-2022

2. Materiale 2D emergente bazate pe rețele metal-organice bidimensionale permetilate - 2D-PerMONSiI, PN-III-P4-ID-PCE-2020-2000, PCE 207/2021, membru în echipă în perioada 2021-2023

3. Silicone-based modular artificial sensing skin for MMOD impact damage detection and evaluation system in spacecraft Force sensors with self-healing properties – SilArtSkin, PN-III-P1-1.1-TE-2021-0156, membru în echipă în perioada 2022-prezent

Semnătură,



Aviz,

Conducător de doctorat

Nume și prenume:

Semnătură,

Cazauc Maria

