

a. Lista cu maximum 10 articole, brevete sau lucrări considerate a fi cele mai relevante

Articole publicate în reviste cotate ISI:

1. **I Macovei**, V Harabagiu, AF Burlec, C Mircea, CE Horhoge, CM Rimbu, L Săcărescu, AD Panainte, A Miron, M Hăncianu, C Nechita, A Corciovă. *Biosynthesis of silver and gold nanoparticles using Geum urbanum L. rhizome extracts and their biological efficiency*. J Inorg Organomet Polym Mat, 2024; 34: 5831 – 5853. (FI = 4,9). <https://link.springer.com/article/10.1007/s10904-024-03189-y>
2. **I Macovei**, SV Luca, K Skalicka-Wozniak, L Săcărescu, CM Rimbu, G Vochița, AC Aprotosoiaie, A Corciovă, A Miron. *Green synthesis of bioactive silver nanoparticles from Fagopyrum esculentum hulls*. Pharmaceutics, 2025; 17(9): 1124. (FI = 5,5). <https://www.mdpi.com/1999-4923/17/9/1124>
3. **I Macovei**, SV Luca, K Skalicka-Wozniak, CE Horhoge, CM Rimbu, L Săcărescu, G Vochita, D Gherghel, BL Ivănescu, AD Panainte, C Nechita. *Silver nanoparticles synthesized from Abies alba and Pinus sylvestris bark extracts*. Antioxidants, 2023; 12(4): 797. (FI = 7) <https://doi.org/10.3390/antiox12040797>
4. SV Luca, **I Macovei**, A Bujor, A Miron, K Skalicka-Wozniak, AC Aprotosoiaie, A Trifan. *Bioactivity of dietary polyphenols: The role of metabolites*. Crit. Rev. Food. Sci. Nutr., 2020; 60(4): 626 – 659. (FI = 6,202) <https://doi.org/10.1080/10408398.2018.1546669>
5. **I Macovei**, SV Luca, K Skalicka-Wozniak, L Săcărescu, P Pascariu, A Ghilan, F Doroftei, EL Ursu, CM Rimbu, CE Horhoge, C Lungu, G Vochita, AD Panainte, C Nechita, MA Corciova, A Miron. *Phyto-functionalized silver nanoparticles derived from conifer bark extracts and evaluation of their antimicrobial and cytogenotoxic effects*. Molecules, 2022; 27(1): 217. (FI = 4,6) <https://doi.org/10.3390/molecules27010217>
6. A Corciova, C Mircea, AF Burlec, A Fifer, I Turin Moleavin, A Sarghi, C Tuchiluş, B Ivănescu, **I Macovei**. *Green synthesis and characterization of silver nanoparticles using a Lythrum salicaria extract and in vitro exploration of their biological activities*. Life, 2022; 12(10): 1642. (FI = 3,2) <https://doi.org/10.3390/life12101643>
7. A Corciovă, C Mircea, A Fifer, IA Turin-Moleavin, I Roșca, **I Macovei***, B Ivănescu, AM Vlase, M Hăncianu, AF Burlec. *Biogenic synthesis of silver nanoparticles mediated by Aronia melanocarpa and their biological evaluation*. Life, 2024; 14(9): 1211. (FI = 3,4). <https://www.mdpi.com/2075-1729/14/9/1211>
8. AF Burlec, M Hăncianu, **I Macovei**, C Mircea, A Fifer, IA Turin Moleavin, C Tuchiluş, S Robu, A Corciovă. *Eco-friendly synthesis and comparative in vitro biological evaluation of silver nanoparticles using Tagetes erecta flower extracts*. Appl. Sci., 2022; 12(2): 887. (FI = 2,7) <https://doi.org/10.3390/app12020887>
9. AF Burlec, **I Macovei**, A Săcărescu, A Corciova, C Mircea, CE Iancu, O Cioanca, M Hăncianu. *Essential oils in wellness centers: overview on european union legislation, potential therapeutic effects and toxicity*. Farmacia, 2020; 68(6): 992 – 998. (IF = 1,433) https://farmaciajournal.com/wp-content/uploads/2020-06-art-05-Burlec_Corciova_Hancianu_992-998.pdf
10. A Corciovă, C Mircea, A Fifer, IA Turin-Moleavin, AF Burlec, B Ivănescu, AM Vlase, M

Hăncianu, I **Macovei**. *A green integrated approach to multifunctional silver nanoparticles derived from Aronia melanocarpa*. *Pharmaceutics*, 2025; 17(5): 669. (FI = 5,5). <https://www.mdpi.com/1999-4923/17/5/669>

b. Teza de doctorat

„Nanoparticule de argint pe bază de extracte vegetale: sinteză, caracterizare fizico – chimică și biologică” – domeniul Farmacie – Farmacognozie, conducător de doctorat Prof. Dr. Anca Miron, Ordinul Ministrului Educației nr. 6700/20.11.2023

Teza doctorat

d. Cărți și capitole de cărți

1. A Corciova, AF Burlec, I **Macovei**. *Analiza produselor cosmetice. Aspecte teoretice și practice*. Editura „Gr. T. Popa” UMF Iași, ISBN 978-606-544-719-6, 2020.

Carte analiza produselor cosmetice

2. E Gille, I **Macovei**, A Miron. *Essential oils and their components as sensitizers of multidrug resistant bacteria*. În *Evidence-based validation of herbal medicine*, editor PK Mukherjee, ed. a II-a, 797 – 810, 2022. <https://doi.org/10.1016/B978-0-323-85542-6.00030-5>

e. Articole/ studii in extenso, publicate în fluxul științific internațional principal

Articole publicate în reviste cotate ISI:

1. I **Macovei**, SV Luca, K Skalicka-Wozniak, CE Horhoge, CM Rambu, L Sacarescu, G Vochita, D Gherghel, BL Ivănescu, AD Panainte, C Nechita. *Silver nanoparticles synthesized from Abies alba and Pinus sylvestris bark extracts*. *Antioxidants*, 2023; 12(4): 797. (FI = 6) <https://doi.org/10.3390/antiox12040797>
2. AF Burlec, M Hăncianu, B Ivănescu, I **Macovei***, A Corciovă. *Exploring the therapeutic potential of natural compounds in psoriasis and their inclusion in nanotechnological systems*. *Antioxidants*, 2024; 13(8): 912. (FI = 6,6). <https://www.mdpi.com/2076-3921/13/8/912>
3. A Corciovă, C Mircea, A Fifere, IA Turin-Moleavin, I Roșca, I **Macovei***, B Ivănescu, AM Vlase, M Hăncianu, AF Burlec. *Biogenic synthesis of silver nanoparticles mediated by Aronia melanocarpa and their biological evaluation*. *Life*, 2024; 14(9): 1211. (FI = 3,4). <https://www.mdpi.com/2075-1729/14/9/1211>
4. I **Macovei**, V Harabagiu, AF Burlec, C Mircea, CE Horhoge, CM Rambu, L Săcărescu, AD Panainte, A Miron, M Hăncianu, C Nechita, A Corciovă. *Biosynthesis of silver and gold nanoparticles using Geum urbanum L. rhizome extracts and their biological efficiency*. *J Inorg Organomet Polym Mat*, 2024; 34: 5831 – 5853. (FI = 4,9). <https://link.springer.com/article/10.1007/s10904-024-03189-y>
5. A Corciovă, C Mircea, A Fifere, IA Turin-Moleavin, AF Burlec, B Ivănescu, AM Vlase, M Hăncianu, I **Macovei**. *A green integrated approach to multifunctional silver nanoparticles derived from Aronia melanocarpa*. *Pharmaceutics*, 2025; 17(5): 669. (FI = 5,5). <https://www.mdpi.com/1999-4923/17/5/669>
6. I **Macovei**, SV Luca, K Skalicka-Wozniak, L Săcărescu, CM Rambu, G Vochița, AC Aprotosoia, A Corciovă, A Miron. *Green synthesis of bioactive silver nanoparticles*

- from *Fagopyrum esculentum* hulls. *Pharmaceutics*, 2025; 17(9): 1124. (FI = 5,5). <https://www.mdpi.com/1999-4923/17/9/1124>
7. OA Măriuț, C Mircea, B Ivănescu, **I Macovei***, A Fifer, I Roșca, IA Turin-Moleavin, AF Burlec, M Hăncianu, A Corciovă. *Naringin and naringenin functionalized silver nanoparticles: synthesis, characterization and biological evaluation*. *Pharmaceutics*, 2025; 17(12): 1569. (FI = 5,5). <https://www.mdpi.com/1999-4923/17/12/1569>
 8. A Călin, AF Burlec, C Mircea, **I Macovei**, M Hăncianu, A Corciovă. *Evolution and comparative analysis of clinical trials on psilocybin in the treatment of psychopathologies: trends in the EU and US*. *J Clin Med*, 2025; 14(18): 6613. (FI = 2,9). <https://www.mdpi.com/2077-0383/14/18/6613>
 9. OA Măriuț, AF Burlec, **I Macovei**, C Mircea, ME Datcu, M Hăncianu, A Corciovă. *Real-world and clinical implications of patient education, lifestyle and treatment adherence in Romanian diabetes care: an observational study*. *J Clin Med*, 2025; 14(20): 7171. (FI = 2,9). <https://www.mdpi.com/2077-0383/14/20/7171>
 10. SV Luca, **I Macovei**, A Bujor, A Miron, K Skalicka-Wozniak, AC Aprotosoiaie, A Trifan. *Bioactivity of dietary polyphenols: The role of metabolites*. *Crit. Rev. Food. Sci. Nutr.*, 2020; 60(4): 626 – 659. (FI = 11,176) <https://doi.org/10.1080/10408398.2018.1546669>
 11. **I Macovei**, SV Luca, K Skalicka-Wozniak, L Sacarescu, P Pascariu, A Ghilan, F Doroftei, EL Ursu, CM Rimbu, CE Horhoga, C Lungu, G Vochita, AD Panainte, C Nechita, MA Corciova, A Miron. *Phyto-functionalized silver nanoparticles derived from conifer bark extracts and evaluation of their antimicrobial and cytogenotoxic effects*. *Molecules*, 2022; 27(1): 217. (FI = 4,6) <https://doi.org/10.3390/molecules27010217>
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 13. A Corciova, A Fifer, I Turin Moleavin, C Mircea, **I Macovei**, AF Burlec. *In vitro evaluation of antioxidant and antibacterial activities of eco-friendly synthesized silver nanoparticles using *Quercus robur* bark extract*. *Curr. Pharm. Biotechnol.*, 2023; 24(3): 460 – 470. (IF = 2,2) <https://doi.org/10.2174/1389201023666220926091306>
 14. AF Burlec, M Hăncianu, **I Macovei**, C Mircea, A Fifer, IA Turin Moleavin, C Tuchiluş, S Robu, A Corciovă. *Eco-friendly synthesis and comparative in vitro biological evaluation of silver nanoparticles using *Tagetes erecta* flower extracts*. *Appl. Sci.*, 2022; 12(2): 887. (FI = 2,7) <https://doi.org/10.3390/app12020887>
 15. P Aelenei, SV Luca, CE Horhoga, CM Rimbu, G Dimitriu, **I Macovei**, M Silion, AC Aprotosoiaie, A Miron. *Morus alba leaf extract: Metabolite profiling and interactions with antibiotics against *Staphylococcus* spp. including MRSA*. *Phytochem. Lett.*, 2019; 31:217-224. (FI = 1,459) <https://doi.org/10.1016/j.phytol.2019.04.006>
 16. AF Burlec, **I Macovei**, A Sacarescu, A Corciova, C Mircea, CE Iancu, O Cioanca, M Hăncianu. *Essential oils in wellness centers: overview on european union legislation, potential therapeutic effects and toxicity*. *Farmacia*, 2020; 68(6): 992 – 998. (IF = 1,433) https://farmaciajournal.com/wp-content/uploads/2020-06-art-05-Burlec_Corciova_Hancianu_992-998.pdf
https://farmaciajournal.com/wp-content/uploads/2020-06-art-05-Burlec_Corciova_Hancianu_992-998.pdf
 17. OA Stoleru, AF Burlec, C Mircea, MG Felea, **I Macovei**, M Hăncianu, A Corciova. *Multiple nanotechnological approaches using natural compounds for diabetes management*. *J Diabetes Metab Disord.*, 2024; 1 – 21. (FI = 1,6) <https://link.springer.com/article/10.1007/s40200-023-01376-1>
 18. AC Luca, AC Morosan, I Macovei, DG Dimitriu, DO Dorohoi, IS Stratulat. *Variational*

method for estimating the dipole moment in the second excited state of fluorescein molecule from its electronic UV absorption spectra. Rev Chim, 2019; 70(10): 3538 – 3544. (FI = 1,755)
<https://revistadechimie.ro/pdf/19%20LUCA%20A%20C%2010%2019.pdf>

Articole publicate în reviste BDI:

1. IA Iliescu, **I Macovei**, A Miron. *Verbascum nigrum L. and Ajuga chia Schreb.: antioxidant activity and correlation with phenolic content*. Rev. Med. Chir. Iasi, 2021; 125(4): 592 – 600. <https://www.revmedchir.ro/index.php/revmedchir/article/view/2501/1795>
2. A Mandici, AA Covrig, I Macovei. *Food phytochemicals against Helicobacter pylori*. Ro J Pharm Pract, 2021; 14(1). https://farma.com.ro/articles/2021.1/RJPhP_2021_1_Art-02.pdf
3. **I Macovei**, A Miron, AC Grădinaru, AC Aprotosoae. *Green synthesized silver nanoparticles via plant extracts as anti-melanoma agents*. Rev. Med. Chir. Iasi, 2018; 122(3): 627 – 633. <https://www.revmedchir.ro/index.php/revmedchir/article/view/1475/1264>
4. **I Macovei**, A Grițco-Todirașcu, LM Ivan, I Hurjui. *Physico-chemical properties of some antibiotics with tuberculostatic activity*. Bul. Inst. Polit. Iași, 2018; 64(68): 32-36. <https://www.cmmi.tuiasi.ro/wp-content/uploads/buletin/fizica/2018/18-3-3.pdf>