

PhD. Student Adelina-Gabriela NICULESCU
List of papers that include data from the thesis

I) PAPERS LIST

1. Articles included in the Ph.D. thesis published as first author in ISI-indexed scientific journals

1. **Niculescu, A.-G.**; Moroşan, A.; Bîrcă, A.C.; Gherasim, O.; Oprea, O.C.; Vasile, B.Ş.; Purcăreanu, B.; Mihaiescu, D.E.; Rădulescu, M.; Grumezescu, A.M. Microwave-Assisted Silanization of Magnetite Nanoparticles Pre-Synthesized by a 3D Microfluidic Platform. *Nanomaterials* **2023**, *13*, doi:10.3390/nano13202795. Quartile: **Q1**, Impact Factor=**5.3**.
2. **Niculescu, A.-G.**; Munteanu, O.M.; Bîrcă, A.C.; Moroşan, A.; Purcăreanu, B.; Vasile, B.Ş.; Istrati, D.; Mihaiescu, D.E.; Hadibarata, T.; Grumezescu, A.M. New 3D Vortex Microfluidic System Tested for Magnetic Core-Shell Fe₃O₄-SA Nanoparticle Synthesis. *Nanomaterials* **2024**, *14*, doi:10.3390/nano14110902. Quartile: **Q1**, Impact Factor=**5.3**.
3. **Niculescu, A.-G.**; Mihaiescu, B.; Bîrcă, A.C.; Moroşan, A.; Munteanu, O.M.; Vasile, B.Ş.; Hadibarata, T.; Istrati, D.; Mihaiescu, D.E.; Grumezescu, A.M. Fabrication and Advanced Imaging Characterization of Magnetic Aerogel-Based Thin Films for Water Decontamination. *Gels* **2024**, *10*, doi:10.3390/gels10060394. Quartile: **Q1**, Impact Factor=**5.0**.
4. **Niculescu, A.-G.**; Bîrcă, A.C.; Moroşan, A.; Oprea, O.C.; Vasile, B.Ş.; Purcăreanu, B.; Mihaiescu, D.E.; Grumezescu, A.M. Simultaneous On-Chip Synthesis and Silanization of Iron Oxide Nanoparticles. *U.P.B. Scientific Bulletin Series B* **2024**, *86*,. Impact Factor=**0.3**.

2. Articles not included in the Ph.D. thesis published as first author in ISI-indexed scientific journals

1. **Niculescu, A.-G.**; Grumezescu, A.M. Polymer-Based Nanosystems—A Versatile Delivery Approach. *Materials* **2021**, *14*, doi:10.3390/ma14226812. Quartile: **Q2**, Impact Factor=**3.623**.
2. **Niculescu, A.-G.**; Bîrcă, A.C.; Grumezescu, A.M. New Applications of Lipid and Polymer-Based Nanoparticles for Nucleic Acids Delivery. *Pharmaceutics* **2021**, *13*, doi:10.3390/pharmaceutics13122053. Quartile: **Q1**, Impact Factor=**6.321**.
3. **Niculescu, A.-G.**; Grumezescu, A.M. Applications of Chitosan-Alginate-Based Nanoparticles—An Up-to-Date Review. *Nanomaterials* **2022**, *12*, doi:10.3390/nano12020186. Quartile: **Q1**, Impact Factor=**5.076**.
4. **Niculescu, A.-G.**; Grumezescu, A.M. An Up-to-Date Review of Biomaterials Application in Wound Management. *Polymers* **2022**, *14*, doi:10.3390/polym14030421. Quartile: **Q1**, Impact Factor=**4.329**.

5. **Niculescu, A.-G.**; Grumezescu, A.M. Novel Tumor-Targeting Nanoparticles for Cancer Treatment—A Review. *International Journal of Molecular Sciences* **2022**, *23*, doi:10.3390/ijms23095253. Quartile: **Q1**, Impact Factor=**5.924**.
6. **Niculescu, A.-G.**; Mihaiescu, D.E.; Grumezescu, A.M. A Review of Microfluidic Experimental Designs for Nanoparticle Synthesis. *International Journal of Molecular Sciences* **2022**, *23*, doi:10.3390/ijms23158293. Quartile: **Q1**, Impact Factor=**6.208**.
7. **Niculescu, A.-G.**; Georgescu, M.; Marinas, I.C.; Ustundag, C.B.; Bertesteanu, G.; Pinteală, M.; Maier, S.S.; Al-Matarneh, C.M.; Angheloiu, M.; Chifiriuc, M.C. Therapeutic Management of Malignant Wounds: An Update. *Current Treatment Options in Oncology* **2024**, *25*, 97-126, doi:10.1007/s11864-023-01172-2. Quartile: **Q2**, Impact Factor=**4.3**.
8. **Niculescu, A.-G.**; Mük, G.R.; Avram, S.; Vlad, I.M.; Limban, C.; Nuta, D.; Grumezescu, A.M.; Chifiriuc, M.-C. Novel strategies based on natural products and synthetic derivatives to overcome resistance in Mycobacterium tuberculosis. *European Journal of Medicinal Chemistry* **2024**, *269*, 116268, doi:10.1016/j.ejmech.2024.116268. Quartile **Q1**, Impact Factor=**6.7**.
9. **Niculescu, A.-G.**; Tudorache, D.-I.; Bocioagă, M.; Mihaiescu, D.E.; Hadibarata, T.; Grumezescu, A.M. An Updated Overview of Silica Aerogel-Based Nanomaterials. *Nanomaterials* **2024**, *14*, doi:10.3390/nano14050469. Quartile: **Q1**, Impact Factor=**5.3**.
10. **Niculescu, A.-G.**; Mihaiescu, B.; Mihaiescu, D.E.; Hadibarata, T.; Grumezescu, A.M. An Updated Overview of Magnetic Composites for Water Decontamination. *Polymers* **2024**, *16*, doi:10.3390/polym16050709. Quartile: **Q1**, Impact Factor=**5**.

3. Articles published during Ph.D. studies as co-author in ISI-indexed scientific journals

1. Spirescu, V.A.; **Niculescu, A.-G.**; Slave, Ș.; Bîrcă, A.C.; Dorcioman, G.; Grumezescu, V.; Holban, A.M.; Oprea, O.-C.; Vasile, B.Ș.; Grumezescu, A.M.; et al. Anti-Biofilm Coatings Based on Chitosan and Lysozyme Functionalized Magnetite Nanoparticles. *Antibiotics* **2021**, *10*, doi:10.3390/antibiotics10101269. Quartile: **Q1**, Impact Factor=**4.639** (**0.357**/co-author).
2. Ion, D.; **Niculescu, A.-G.**; Păduraru, D.N.; Andronic, O.; Mușat, F.; Grumezescu, A.M.; Bolocan, A. An Up-to-Date Review of Natural Nanoparticles for Cancer Management. *Pharmaceutics* **2022**, *14*, doi:10.3390/pharmaceutics14010018. Quartile: **Q1**, Impact Factor=**6.321** (**0.903**/co-author).
3. Caciandone, M.; **Niculescu, A.-G.**; Roșu, A.R.; Grumezescu, V.; Negut, I.; Holban, A.M.; Oprea, O.; Vasile, B.Ș.; Bîrcă, A.C.; Grumezescu, A.M.; et al. PEG-Functionalized Magnetite Nanoparticles for Modulation of Microbial Biofilms on Voice Prosthesis. *Antibiotics* **2022**, *11*, doi:10.3390/antibiotics11010039. Quartile: **Q1**, Impact Factor=**4.639** (**0.357**/co-author).
4. Bădilă, A.E.; Rădulescu, D.M.; Ilie, A.; **Niculescu, A.-G.**; Grumezescu, A.M.; Rădulescu, A.R. Bone Regeneration and Oxidative Stress: An Updated Overview. *Antioxidants* **2022**, *11*, doi:10.3390/antiox11020318. Quartile: **Q1**, Impact Factor=**6.313** (**1.052**/co-author).
5. Păduraru, D.N.; Ion, D.; **Niculescu, A.-G.**; Mușat, F.; Andronic, O.; Grumezescu, A.M.; Bolocan, A. Recent Developments in Metallic Nanomaterials for Cancer Therapy, Diagnosing and Imaging Applications. *Pharmaceutics* **2022**, *14*,

doi:10.3390/pharmaceutics14020435. Quartile: **Q1**, Impact Factor=**6.321 (0.903/co-author)**.

6. Busnatu, Ș.; **Niculescu, A.-G.**; Bolocan, A.; Petrescu, G.E.D.; Păduraru, D.N.; Năstasă, I.; Lupușoru, M.; Geantă, M.; Andronic, O.; Grumezescu, A.M.; et al. Clinical Applications of Artificial Intelligence—An Updated Overview. *Journal of Clinical Medicine* **2022**, *11*, doi:10.3390/jcm11082265. Quartile: **Q1**, Impact Factor=**4.242 (0.385/co-author)**.
7. Costăchescu, B.; **Niculescu, A.-G.**; Dabija, M.G.; Teleanu, R.I.; Grumezescu, A.M.; Eva, L. Novel Strategies for Spinal Cord Regeneration. *International Journal of Molecular Sciences* **2022**, *23*, doi:10.3390/ijms23094552. Quartile: **Q1**, Impact Factor=**5.924 (0.987/co-author)**.
8. Teleanu, R.I.; Preda, M.D.; **Niculescu, A.-G.**; Vladăcenco, O.; Radu, C.I.; Grumezescu, A.M.; Teleanu, D.M. Current Strategies to Enhance Delivery of Drugs across the Blood–Brain Barrier. *Pharmaceutics* **2022**, *14*, doi:10.3390/pharmaceutics14050987. Quartile: **Q1**, Impact Factor=**6.321 (0.903/co-author)**.
9. Caciandone, M.; **Niculescu, A.-G.**; Grumezescu, V.; Bîrcă, A.C.; Ghica, I.C.; Vasile, B.Ș.; Oprea, O.; Nica, I.C.; Stan, M.S.; Holban, A.M.; et al. Magnetite Nanoparticles Functionalized with Therapeutic Agents for Enhanced ENT Antimicrobial Properties. *Antibiotics* **2022**, *11*, doi:10.3390/antibiotics11050623. Quartile: **Q1**, Impact Factor=**4.639 (0.357/co-author)**.
10. Teleanu, R.I.; **Niculescu, A.-G.**; Roza, E.; Vladăcenco, O.; Grumezescu, A.M.; Teleanu, D.M. Neurotransmitters—Key Factors in Neurological and Neurodegenerative Disorders of the Central Nervous System. *International Journal of Molecular Sciences* **2022**, *23*, doi:10.3390/ijms23115954. Quartile: **Q1**, Impact Factor=**5.924 (0.987/co-author)**.
11. Teleanu, D.M.; **Niculescu, A.-G.**; Lungu, I.I.; Radu, C.I.; Vladăcenco, O.; Roza, E.; Costăchescu, B.; Grumezescu, A.M.; Teleanu, R.I. An Overview of Oxidative Stress, Neuroinflammation, and Neurodegenerative Diseases. *International Journal of Molecular Sciences* **2022**, *23*, doi:10.3390/ijms23115938. Quartile: **Q1**, Impact Factor=**5.924 (0.658/co-author)**.
12. Costăchescu, B.; **Niculescu, A.-G.**; Teleanu, R.I.; Iliescu, B.F.; Rădulescu, M.; Grumezescu, A.M.; Dabija, M.G. Recent Advances in Managing Spinal Intervertebral Discs Degeneration. *International Journal of Molecular Sciences* **2022**, *23*, doi:10.3390/ijms23126460. Quartile: **Q1**, Impact Factor=**5.924 (0.846/co-author)**.
13. Păduraru, D.N.; **Niculescu, A.-G.**; Bolocan, A.; Andronic, O.; Grumezescu, A.M.; Bîrlă, R. An Updated Overview of Cyclodextrin-Based Drug Delivery Systems for Cancer Therapy. *Pharmaceutics* **2022**, *14*, doi:10.3390/pharmaceutics14081748. Quartile: **Q1**, Impact Factor=**6.525 (1.087/co-author)**.
14. Busnatu, Ș.S.; **Niculescu, A.-G.**; Bolocan, A.; Andronic, O.; Pantea Stoian, A.M.; Scafa-Udriște, A.; Stănescu, A.M.; Păduraru, D.N.; Nicolescu, M.I.; Grumezescu, A.M.; et al. A Review of Digital Health and Biotelemetry: Modern Approaches towards Personalized Medicine and Remote Health Assessment. *Journal of Personalized Medicine* **2022**, *12*, doi:10.3390/jpm12101656. Quartile: **Q2**, Impact Factor=**3.508 (0.351/co-author)**.
15. Mercan, D.-A.; **Niculescu, A.-G.**; Grumezescu, A.M. Nanoparticles for Antimicrobial Agents Delivery—An Up-to-Date Review. *International Journal of Molecular Sciences* **2022**, *23*, doi:10.3390/ijms232213862. Quartile: **Q1**, Impact Factor=**6.208 (2.069/co-author)**.
16. Costăchescu, B.; **Niculescu, A.-G.**; Iliescu, B.F.; Dabija, M.G.; Grumezescu, A.M.; Rotariu, D. Current and Emerging Approaches for Spine Tumor Treatment. *International*

- Journal of Molecular Sciences* **2022**, *23*, doi:10.3390/ijms232415680. Quartile: **Q1**, Impact Factor=**6.208** (**1.035**/co-author).
17. Scafa Udriște, A.; **Niculescu, A.-G.**; Iliuță, L.; Bajeu, T.; Georgescu, A.; Grumezescu, A.M.; Bădilă, E. Progress in Biomaterials for Cardiac Tissue Engineering and Regeneration. *Polymers* **2023**, *15*, doi:10.3390/polym15051177. Quartile: **Q1**, Impact Factor=**4.967** (**0.709**/co-author).
 18. Bîrcă, A.C.; Chircov, C.; **Niculescu, A.G.**; Hildegard, H.; Baltă, C.; Roșu, M.; Mladin, B.; Gherasim, O.; Mihaiescu, D.E.; Vasile, B.Ș.; et al. H2O2-PLA-(Alg)2Ca Hydrogel Enriched in Matrigel® Promotes Diabetic Wound Healing. *Pharmaceutics* **2023**, *15*, doi:10.3390/pharmaceutics15030857. Quartile: **Q1**, Impact Factor=**6.525** (**0.502**/co-author).
 19. Teleanu, R.I.; **Niculescu, A.-G.**; Vladacenco, O.A.; Roza, E.; Perjoc, R.-S.; Teleanu, D.M. The State of the Art of Pediatric Multiple Sclerosis. *International Journal of Molecular Sciences* **2023**, *24*, doi:10.3390/ijms24098251. Quartile: **Q1**, Impact Factor=**6.208** (**1.035**/co-author).
 20. Bîrcă, A.C.; Gherasim, O.; **Niculescu, A.-G.**; Grumezescu, A.M.; Neacșu, I.A.; Chircov, C.; Vasile, B.Ș.; Oprea, O.C.; Andronescu, E.; Stan, M.S.; et al. A Microfluidic Approach for Synthesis of Silver Nanoparticles as a Potential Antimicrobial Agent in Alginate–Hyaluronic Acid-Based Wound Dressings. *International Journal of Molecular Sciences* **2023**, *24*, doi:10.3390/ijms241411466. Quartile: **Q1**, Impact Factor=**5.6** (**0.431**/co-author).
 21. Constantin, M.; Petrescu, L.; Mătanie, C.; Vrancianu, C.O.; **Niculescu, A.-G.**; Andronic, O.; Bolocan, A. The Vermiform Appendix and Its Pathologies. *Cancers* **2023**, *15*, doi:10.3390/cancers15153872. Quartile: **Q2**, Impact Factor=**5.2** (**0.743**/co-author).
 22. Costăchescu, B.; **Niculescu, A.-G.**; Grumezescu, A.M.; Teleanu, D.M. Screw Osteointegration—Increasing Biomechanical Resistance to Pull-Out Effect. *Materials* **2023**, *16*, doi:10.3390/ma16165582. Quartile: **Q2**, Impact Factor=**3.4** (**0.850**/co-author).
 23. Najm, A.; **Niculescu, A.-G.**; Rădulescu, M.; Gaspar, B.S.; Grumezescu, A.M.; Beuran, M. Novel Material Optimization Strategies for Developing Upgraded Abdominal Meshes. *International Journal of Molecular Sciences* **2023**, *24*, doi:10.3390/ijms241814298. Quartile: **Q1**, Impact Factor=**5.6** (**0.933**/co-author).
 24. Najm, A.; **Niculescu, A.-G.**; Gaspar, B.S.; Grumezescu, A.M.; Beuran, M. A Review of Abdominal Meshes for Hernia Repair—Current Status and Emerging Solutions. *Materials* **2023**, *16*, doi:10.3390/ma16227124. Quartile: **Q2**, Impact Factor=**3.4** (**0.680**/co-author).
 25. Roman, H.; **Niculescu, A.-G.***; Lazăr, V.; Mitache, M.M. Antibacterial Efficiency of Tanacetum vulgare Essential Oil against ESKAPE Pathogens and Synergisms with Antibiotics. *Antibiotics* **2023**, *12*, doi:10.3390/antibiotics12111635. Quartile: **Q1**, Impact Factor=**4.8** (**4.8**/corresponding author).
 26. Najm, A.; **Niculescu, A.-G.**; Bolocan, A.; Rădulescu, M.; Grumezescu, A.M.; Beuran, M.; Gaspar, B.S. Chitosan and Cyclodextrins—Versatile Materials Used to Create Drug Delivery Systems for Gastrointestinal Cancers. *Pharmaceutics* **2024**, *16*, doi:10.3390/pharmaceutics16010043. Quartile: **Q1**, Impact Factor=**5.4** (**0.771**/co-author).
 27. Constantinescu, S.; **Niculescu, A.-G.**; Hudiță, A.; Grumezescu, V.; Rădulescu, D.; Bîrcă, A.C.; Irimiciuc, S.A.; Gherasim, O.; Holban, A.M.; Gălățeanu, B.; et al. Silver/Graphene Oxide Nanostructured Coatings for Modulating the Microbial Susceptibility of Fixation

- Devices Used in Knee Surgery. *International Journal of Molecular Sciences* **2024**, *25*, doi:10.3390/ijms25010246. Quartile: **Q1**, Impact Factor=**5.6** (**0.350**/co-author).
- 28.** Petrariu, O.-A.; Barbu, I.C.; **Niculescu, A.-G.**; Constantin, M.; Grigore, G.A.; Cristian, R.-E.; Mihaescu, G.; Vrancianu, C.O. Role of probiotics in managing various human diseases, from oral pathology to cancer and gastrointestinal diseases. *Frontiers in Microbiology* **2024**, *14*, doi:10.3389/fmicb.2023.1296447. Quartile: **Q2**, Impact Factor=**5.2** (**0.650**/co-author).
- 29.** Scafa Udriște, A.; Burdușel, A.C.; **Niculescu, A.-G.**; Rădulescu, M.; Grumezescu, A.M. Metal-Based Nanoparticles for Cardiovascular Diseases. *International Journal of Molecular Sciences* **2024**, *25*, doi:10.3390/ijms25021001. Quartile: **Q1**, Impact Factor=**5.6** (**1.120**/co-author).
- 30.** Scafa Udriște, A.; Burdușel, A.C.; **Niculescu, A.-G.**; Rădulescu, M.; Grumezescu, A.M. Coatings for Cardiovascular Stents—An Up-to-Date Review. *International Journal of Molecular Sciences* **2024**, *25*, doi:10.3390/ijms25021078. Quartile: **Q1**, Impact Factor=**5.6** (**1.120**/co-author).
- 31.** Bajeu, I.-T.; **Niculescu, A.-G.**; Scafa-Udriște, A.; Andronescu, E. Intrastent Restenosis: A Comprehensive Review. *International Journal of Molecular Sciences* **2024**, *25*, doi:10.3390/ijms25031715. Quartile: **Q1**, Impact Factor=**5.6** (**1.400**/co-author).
- 32.** Constantinescu, S.; **Niculescu, A.-G.**; Hudiță, A.; Grumezescu, V.; Rădulescu, D.; Bîrcă, A.C.; Dorcioman, G.; Gherasim, O.; Holban, A.M.; Gălățeanu, B.; et al. Nanostructured Coatings Based on Graphene Oxide for the Management of Periprosthetic Infections. *International Journal of Molecular Sciences* **2024**, *25*, doi:10.3390/ijms25042389. Quartile: **Q1**, Impact Factor=**5.6** (**0.400**/co-author).
- 33.** Vlad, I.M.; Nuță, D.C.; Căproiu, M.T.; Dumitrașcu, F.; Kapronczai, E.; Mük, G.R.; Avram, S.; **Niculescu, A.G.**; Zarafu, I.; Ciorobescu, V.A.; et al. Synthesis and Characterization of New N-acyl Hydrazone Derivatives of Carprofen as Potential Tuberculostatic Agents. *Antibiotics* **2024**, *13*, doi:10.3390/antibiotics13030212. **Q1**, Impact Factor=**4.8** (**0.400**/co-author).
- 34.** Najm, A.; **Niculescu, A.-G.**; Grumezescu, A.M.; Beuran, M. Emerging Therapeutic Strategies in Sarcopenia: An Updated Review on Pathogenesis and Treatment Advances. *International Journal of Molecular Sciences* **2024**, *25*, doi:10.3390/ijms25084300. Quartile: **Q1**, Impact Factor=**5.6** (**1.400**/co-author).
- 35.** Bîrcă, A.C.; Gherasim, O.; **Niculescu, A.-G.**; Grumezescu, A.M.; Vasile, B.Ș.; Mihaiescu, D.E.; Neacșu, I.A.; Andronescu, E.; Trușcă, R.; Holban, A.M.; et al. Infection-Free and Enhanced Wound Healing Potential of Alginate Gels Incorporating Silver and Tannylated Calcium Peroxide Nanoparticles. *International Journal of Molecular Sciences* **2024**, *25*, doi:10.3390/ijms25105196. Quartile: **Q1**, Impact Factor=**5.6** (**0.467**/co-author).
- 36.** Scafa Udriște, A.; Burdușel, A.C.; **Niculescu, A.-G.**; Rădulescu, M.; Balaure, P.C.; Grumezescu, A.M. Organic Nanoparticles in Progressing Cardiovascular Disease Treatment and Diagnosis. *Polymers* **2024**, *16*, doi:10.3390/polym16101421. Quartile: **Q1**, Impact Factor=**5** (**0.833**/co-author).
- 37.** Croitoru, G.-A.; Pîrvulescu, D.-C.; **Niculescu, A.-G.**; Rădulescu, M.; Grumezescu, A.M.; Nicolae, C.-L. Advancements in Aerogel Technology for Antimicrobial Therapy: A Review. *Nanomaterials* **2024**, *14*, doi:10.3390/nano14131110. Quartile: **Q1**, Impact Factor=**4.4** (**0.733**/co-author).
- 38.** Nicolae, C.-L.; Pîrvulescu, D.-C.; Antohi, A.M.; **Niculescu, A.G.***; Grumezescu, A.M.; Croitoru, G.-A. Silica nanoparticles in medicine: overcoming pathologies through advanced drug delivery, diagnostics, and therapeutic strategies. *Romanian Journal of*

- Morphology & Embryology* **2024**, 65, doi:10.47162/RJME.65.2. Impact Factor=**1.2** (**1.2**/corresponding author).
39. Croitoru, G.-A.; Pîrvulescu, D.-C.; **Niculescu, A.G.***; Grumezescu, A.M.; Antohi, A.M.; Nicolae, C.-L. Metallic nanomaterials–targeted drug delivery approaches for improved bioavailability, reduced side toxicity, and enhanced patient outcomes. *Romanian Journal of Morphology & Embryology* **2024**, 65, doi:10.47162/RJME.65.2.y. Impact Factor=**1.2** (**1.2**/corresponding author).
 40. Croitoru, G.-A.; Pîrvulescu, D.-C.; **Niculescu, A.-G.***; Epistatu, D.; Rădulescu, M.; Grumezescu, A.M.; Nicolae, C.-L. Nanomaterials in Immunology: Bridging Innovative Approaches in Immune Modulation, Diagnostics, and Therapy. *Journal of Functional Biomaterials* **2024**, 15, doi:10.3390/jfb15080225. Impact factor=**5.0** (**5.0**/corresponding author).
 41. Constantinescu, S.; Gherasim, O.; Dorcioman, G.; Grumezescu, V.; Iosub, G.; **Niculescu, A.-G.***; Moldoveanu, E.-T.; Rădulescu, D.M.; Grumezescu, A.M.; Stan, M.S.; Holban, A.M.; Rădulescu, A.-R. MAPLE-prepared graphene oxide-based coatings for improved orthopedic screws used in knee interventions. *Romanian Journal of Morphology & Embryology* **2024**, 65, doi:10.47162/RJME.65.2.y. Impact Factor=**1.2** (**1.2**/corresponding author).
 42. Nicolae, C.-L.; Pîrvulescu, D.-C.; **Niculescu, A.-G.**; Rădulescu, M.; Grumezescu, A.M.; Croitoru, G.-A. An Overview of Nanotechnology in Dental Medicine. *Journal of Composites Science* **2024**, 8, doi:10.3390/jcs8090352. Quartile: **Q2**, Impact Factor=**3.0** (**0.5**/co-author).
 43. Nicolae, C.-L.; Pîrvulescu, D.-C.; **Niculescu, A.-G.**; Epistatu, D.; Mihaiescu, D.E.; Antohi, A.M.; Grumezescu, A.M.; Croitoru, G.-A. An Up-to-Date Review of Materials Science Advances in Bone Grafting for Oral and Maxillofacial Pathology. *Materials* **2024**, 17, 4782, doi:10.3390/ma17194782. Quartile: **Q1**, Impact Factor=**3.1** (**0.387**/co-author).
 44. Croitoru, G.-A.; **Niculescu, A.-G.***; Epistatu, D.; Mihaiescu, D.E.; Antohi, A.M.; Grumezescu, A.M.; Nicolae, C.-L. Nanostructured Drug Delivery Systems in Immunotherapy: An Updated Overview of Nanotechnology-Based Therapeutic Innovations. *Appl. Sci.* **2024**, 14, 8948, doi:10.3390/app14198948. Quartile: **Q1**, Impact factor=**2.5** (**2.5**/corresponding author).
 45. Najm, A.; Moldoveanu, E.-T.; **Niculescu, A.-G.**; Grumezescu, A.M.; Beuran, M.; Gaspar, B.S. Advancements in Drug Delivery Systems for the Treatment of Sarcopenia: An Updated Overview. *Int. J. Mol. Sci.* **2024**, 25, 10766, doi:10.3390/ijms251910766. Quartile: **Q1**, Impact Factor=**4.9** (**0.816**/co-author).
 46. Burdușel, A.-C.; Sarchizian, D.; **Niculescu, A.-G.**; Holban, A.M.; Popescu, R.-C.; Trușcă, R.; Andronescu, E. Synthesis and characterization of hydroxyapatite–zinc oxide nanocomposites incorporating rosemary and thyme essential oils for enhanced bone regeneration and antimicrobial activity. *Romanian Journal of Morphology & Embryology* **2024**, 65, doi:10.47162/RJME.65.3.y. Impact Factor=**1.2** (**0.171**/co-author).

II) SCIENTIFIC MEETINGS ATTENDED

1. **Niculescu, A.-G.**; Bîrcă, A.C.; Moroșan, A.; Purcăreanu, B.; Mihaiescu, D.E.; Vasile, B.Ș.; Hadibarata, T.; Grumezescu, A.G. Multifunctional magnetic nanoparticles obtained through microfluidic techniques. *2023 Fall Meeting of the European Materials*

- Research Society (E-MRS) - Symposium I - "Synthesis and characterization of functional nanocomposite materials".* Warsaw, Poland, 18-21 Sept. **2023.** – **poster presentation.**
2. Bîrcă, A.C.; **Niculescu, A.-G.**; Moroşan, A.; Purcăreanu, B.; Mihaiescu, D.E.; Vasile, B.Ş.; Hadibarata, T.; Grumezescu, A.G. Aerogel-based composites obtained through microfluidic methods for water decontamination. *2023 Fall Meeting of the European Materials Research Society (E-MRS) - Symposium I - "Synthesis and characterization of functional nanocomposite materials".* Warsaw, Poland, 18-21 Sept. **2023.** – **poster presentation.**
 3. **Niculescu, A.-G.**; Bîrcă, A.C.; Moroşan, A.; Purcăreanu, B.; Mihaiescu, D.E.; Vasile, B.Ş.; Mihaiescu, B.; Hadibarata, T.; Grumezescu, A.M. Magnetic composite aerogel microspheres synthesis, optimization, and applications. *Conferința Societății de Microscopie Electronică din România - C.R.E.M.S. Cluj-Napoca, Romania, 18-21 Oct. 2023.* – **poster presentation.**
 4. **Niculescu, A.-G.**; Bîrcă, A.C.; Moroşan, A.; Purcăreanu, B.; Mihaiescu, D.E.; Vasile, B.Ş.; Mihaiescu, B.; Hadibarata, T.; Grumezescu, A.M. Aerogel-based systems for organic pollutants water decontamination. *Conferința Societății de Microscopie Electronică din România - C.R.E.M.S. Cluj-Napoca, Romania, 18-21 Oct. 2023.* – **poster presentation.**
 5. **Niculescu, A.-G.**; Bîrcă, A.C.; Moroşan, A.; Purcăreanu, B.; Mihaiescu, D.E.; Vasile, B.Ş.; Mihaiescu, B.; Hadibarata, T.; Grumezescu, A.M. Aerogel-based magnetic composites – novel solution for water decontamination applications. *Conferința Societății de Microscopie Electronică din România - C.R.E.M.S. Cluj-Napoca, Romania, 18-21 Oct. 2023.* – **poster presentation.**
 6. Mihaiescu, B.; **Niculescu, A.-G.**; Bîrcă, A.C.; Moroşan, A.; Purcăreanu, B.; Vasile, B.Ş.; Hadibarata, T.; Istrati, D.; Mihaiescu, D.E.; Grumezescu, A.M. Advanced imaging techniques for aerogel-based thin film characterization. *Conferința Societății de Microscopie Electronică din România - C.R.E.M.S. Cluj-Napoca, Romania, 18-21 Oct. 2023.* – **oral presentation.**
 7. Bîrcă, A.C.; **Niculescu, A.-G.**; Grumezescu, A.M.; Vasile, B.Ş.; Andronescu, E. Cross shape microfluidic platform for silver nanoparticles: synthesis focused on alginate wound dressing. *Conferința Societății de Microscopie Electronică din România - C.R.E.M.S. Cluj-Napoca, Romania, 18-21 Oct. 2023.* – **poster presentation.**
 8. Voicu, S.N.; Voinea, I.C.; **Niculescu, A.**; Mihaiescu, D.E.; Grumezescu, A.; Stan, M.S. Characterizing the biological behavior of Fe₃O₄ nanoparticles conjugated with acridine orange using in vitro co-culture systems relevant to skin, lung and gut barrier models. *4th International Electronic Conference on Applied Sciences - session Applied Biosciences and Bioengineering.* 27 Oct. **2023.** – **online presentation.**
 9. Balaure, P.C.; Grumezescu, V.; Bîrcă, A.C.; **Niculescu, A.**; Vasile, B.Ş.; Holban, A.M.; Voinea, I.C.; Stan, M.; Grumezescu, A.M. Anti-Biofilm MAPLE-Deposited Thin Coatings Based on Core@Double-Shell Magnetite Nanoparticles. *34th Congress of the European Society of Clinical Microbiology and Infectious Diseases (ESCMID).* Barcelona, Spain, 27-30 Apr. **2024.** – **oral presentation.**
 10. **Niculescu, A.-G.**; Bîrcă, A.C.; Moroşan, A.; Purcăreanu, B.; Mihaiescu, B.; Tudorache, D.-I.; Vasile, B.Ş.; Hadibarata, T.; Mihaiescu, D.E.; Grumezescu, A.G. Silica-based composite aerogel nanofilms for pesticide residue removal and detection. *2024 Spring Meeting of the European Materials Research Society (E-MRS) - Symposium I – Nano-engineered coatings and thin films: from fundamentals to applications.* Strasbourg, France, 27-31 Mai **2024.** – **poster presentation.**

11. **Niculescu, A.-G.**; Bîrcă, A.C.; Moroşan, A.; Purcăreanu, B.; Mihaiescu, B.; Tudorache, D.-I.; Vasile, B.Ş.; Hadibarata, T.; Mihaiescu, D.E.; Grumezescu, A.G. Aerogel-based nanofilm catalysts for CO₂ conversion. *2024 Spring Meeting of the European Materials Research Society (E-MRS) - Symposium I – Nano-engineered coatings and thin films: from fundamentals to applications*. Strasbourg, France, 27-31 Mai **2024**. – **poster presentation**.
12. Mitache, M.; Cornea, M.; Grigore, G.; **Niculescu, A.**; Cochior, D.; Rusu, E.; Tudorache, S.; Moldovan, C.; Popa, C.; Sorescu, G.; Mitache, A.; Chifiriuc, M.C. The Contribution of Staphylococcus Genus to Pathogenicity and Virulence in the Hospital Environment. *48th Federation of European Biochemical Societies (FEBS) CONGRESS*. Milan, Italy, 29 Iunie – 3 Iulie **2024**. – **poster presentation**.
13. **Niculescu, A.-G.**; Bîrcă, A.C.; Moroşan, A.; Purcăreanu, B.; Mihaiescu, B.; Tudorache, D.-I.; Vasile, B.Ş.; Hadibarata, T.; Mihaiescu, D.E.; Grumezescu, A.M. 3D-printed microfluidic devices for magnetic nano and microparticle synthesis of use in environmental applications. *10th International Conference on Advanced Materials (ROCAM 2024) - Section II - Thin Films, 2D Systems and Nanostructures*. Bucureşti, România, 15-18 Iulie **2024**. – **poster presentation**.
14. **Niculescu, A.-G.**; Bîrcă, A.C.; Moroşan, A.; Purcăreanu, B.; Mihaiescu, B.; Tudorache, D.-I.; Vasile, B.Ş.; Hadibarata, T.; Mihaiescu, D.E.; Grumezescu, A.M. Cross-flow 3D microfluidic device for aerogel nanocomposites synthesis. *10th International Conference on Advanced Materials (ROCAM 2024) - Section II - Thin Films, 2D Systems and Nanostructures*. Bucureşti, România, 15-18 Iulie **2024**. – **poster presentation**.
15. **Niculescu, A.-G.**; Bîrcă, A.C.; Moroşan, A.; Tudorache, D.-I.; Vasile, B.Ş.; Istrati, D.; Hadibarata, T.; Mihaiescu, D.E.; Grumezescu, A.M. New 3D Vortex Microfluidic System Tested for Magnetic Nanocomposite Formulations. *23rd Romanian International Conference on Chemistry and Chemical Engineering (RICCCE 2024) – Section 4 – Nanosciences and Nanotechnology*. Constanţa, România, 4-7 Septembrie **2024**. – **poster presentation**.
16. Tudorache, D.-I.; **Niculescu, A.-G.**; Bîrcă, A.C.; Holban, A.M.; Hudiţă, A.; Vasile, B.Ş.; Istrati, D.; Hadibarata, T.; Mihaiescu, D.E.; Grumezescu, A.M. Multiple-Shell Magnetite Nanoparticles for Biomedical Applications. *23rd Romanian International Conference on Chemistry and Chemical Engineering (RICCCE 2024) – Section 4 – Nanosciences and Nanotechnology*. Constanţa, România, 4-7 Septembrie **2024**. – **poster presentation**.
17. **Niculescu, A.-G.**; Truşcă, R.D.; Moroşan, A.; Rădulescu, M.; Tudorache, D.-I.; Vasile, B.Ş.; Istrati, D.; Hadibarata, T.; Mihaiescu, D.E.; Grumezescu, A.M. Evaluation of water decontamination capacity using advanced nanostructured magnetic aerogel composite materials. *23rd Romanian International Conference on Chemistry and Chemical Engineering (RICCCE 2024) – Section 4 – Nanosciences and Nanotechnology*. Constanţa, România, 4-7 Septembrie **2024**. – **poster presentation**.
18. **Niculescu, A.-G.**; Truşcă, R.D.; Burduşel, A.C.; Purcăreanu, B.; Tudorache, D.-I.; Vasile, B.Ş.; Istrati, D.; Hadibarata, T.; Grumezescu, A.M.; Mihaiescu, D.E. Solid Phase Extraction of Pesticides from Surface Water Through Aerogel Nanocomposites and HR-MS Characterization. *23rd Romanian International Conference on Chemistry and Chemical Engineering (RICCCE 2024) – Section 5 – Pharmaceutical Engineering & Food Safety*. Constanţa, România, 4-7 Septembrie **2024**. – **oral presentation**.
19. Balaure, P.C.; Grumezescu, V.; Bîrcă, A.C.; Bratu, A.; **Niculescu, A.-G.**; Vasile, B.Ş.; Holban, A.M.; Voinea, I.C.; Stan, M.S. Thin coatings based on magnetic nanoparticles for protection of medical devices against microbial infection. *23rd Romanian International Conference on Chemistry and Chemical Engineering (RICCCE 2024) –*

Section 5 – Pharmaceutical Engineering & Food Safety. Constanța, România, 4-7 Septembrie 2024. – poster presentation.

- 20. Niculescu, A.-G.;** Bîrcă, A.C.; Tudorache, D.-I.; Holban, A.M; Hudiță, A.; Trușcă, R.D.; Munteanu (Mihaiescu) O.M.; Vasile, B.Ș.; Rădulescu, M.; Hadibarata, T.; Grumezescu, A.M. Innovative 3D Microfluidic Synthesis of Magnetic Nanoparticle-Enhanced Silica Aerogel Composites for Efficient Pesticide Removal from Water. *10th International Conference on Materials Science and Condensed Matter Physics (MSCMP 2024) – Topic „Solid State Nanophysics and Nanotechnology (SSNN)”*. Chișinău, Republic of Moldova, 1 – 4 October 2024. – poster presentation.
- 21. Niculescu, A.-G.;** Bîrcă, A.C.; Tudorache, D.-I.; Holban, A.M; Hudiță, A.; Trușcă, R.D.; Istrati, D.; Vasile, B.Ș.; Hadibarata, T.; Grumezescu, A.M.; Mihaiescu, D.E. Development of Functionalized Silica Aerogel Nanocomposites for Solid Phase Extraction in Environmental Monitoring. *10th International Conference on Materials Science and Condensed Matter Physics (MSCMP 2024) – Topic „Solid State Nanophysics and Nanotechnology (SSNN)”*. Chișinău, Republic of Moldova, 1 – 4 October 2024. – poster presentation.

III) Cumulated Impact Factor

Publications	Cumulated impact factor
- Included in the Ph.D. thesis	15.9
- Published during the doctoral stage, but not included in the Ph.D. thesis	99.312
TOTAL	115.212