Daria Ioana STOIA

PhD student of the Biomolecular Physics Department of the Faculty of Physics, Babeș-Bolyai University; Research Assistant at the NanoBioPhotonics and Laser Microspectroscopy Center, Interdisciplinary Research Institute in Bionanosciences, Babeș-Bolyai University, Cluj-Napoca, Romania.

ORCID: 0000-0002-9252-7197

UEF-ID BrainMap: U-2100-066P-6761

ResearchGate: https://www.researchgate.net/profile/Daria-Stoia

Email: daria.stoia@ubbcluj.ro/ daria.s.ioana@gmail.com



Expertise: Daria has an ongoing research interest focused on a complex and highly interdisciplinary topic, specifically the development and implementation of nanoparticles (both plasmonic and organic), their characterization, and application as fluorescent contrast agents, therapeutic agents, drug-delivery platforms, and sensing agents. Throughout her career and attendance at numerous international conferences and various international laboratories, she gained invaluable expertise in:

- Synthesis, optimization, and spectroscopic characterization of organic and plasmonic nanoparticles;
- Nanoparticle biofunctionalization for several applications such as targeted drug delivery, dual phototherapy, and selective biosensing;
- Optical spectroscopy: UV-Vis-NIR spectroscopy, steady-state fluorescent spectroscopy, dynamic light scattering, Zeta potential, Raman spectroscopy, and SERS.

Scientific activity visibility:

- ISI Publications: 10 published scientific articles, 7 as main author; cumulated IF: 60.817, h-index: 6 (Google Scholar);
- Book chapter: co-author in two book chapters, World Scientific and Springer Publishing;
- Scientific communications: >20 international scientific communications and 3 international summer schools;
- Awards: Student Excellentia Award (2023), PhD Student Excellentia Award (2024) – awarded by Babeș-Bolyai University;
- Research projects: key member in 5 UEFISCDI research projects.

Fellowships and Awards:

- **2026:** Featured in the **„2026 International Women's Day: Women in Journal of Materials Chemistry B collection"**, Royal Society of Chemistry
- **2025: STAR-UBB Doctoral Advanced Fellowship CNFIS-FDI-2025-F-0154,** Personalized Paper-Based Plasmonic Sensor for Enhanced SERS and Thermoplasmonic Detection *(acronym: PAPER-SENSE)*, 3 months, Babeș-Bolyai University
- **2024: STAR-UBB Doctoral Advanced Fellowship CNFIS-FDI-2024-F-0456,** Tunable Hybrid Microcapsules Loaded with Anisotropic Gold Nanoparticles for Photothermal Therapy *(acronym: Au4Therapy)*, 3 months, Babeș-Bolyai University

- **2024: Bourses France Excellence Roumanie Scholarship**, The French Government
- **2024: PhD Student Excellentia Award,** Babeș-Bolyai University
- **2023: Student Excellentia Award,** Babeș-Bolyai University
- **2021: Special Scholarship for Scientific Activity**, Polymeric Microcapsules for Targeted and Controlled Delivery of Therapeutic Molecules to the Human Retina, 1 year, contract no. 36605/02.12.2021, STAR-UBB, Babeș-Bolyai University

Teaching activities:

- **February – June 2026:** Teaching laboratory practice: *Protein Nanoparticles: Changes in Hydrodynamic Diameter and Zeta Potential as a Function of pH*, in the framework of „Nanobiotechnology", 2nd-year master students, Faculty of Physics, Babeș-Bolyai University.
- **October 2024 – February 2025:** Teaching laboratory practice: *Confocal Raman Xplora Horiba – Introduction*, in the framework of „Molecular spectroscopy complements", 1st-year master students, Faculty of Physics, Babeș-Bolyai University.
- **February – June 2024:** Teaching laboratory practice „Medical Equipment", 2nd-year bachelor students, Faculty of Physics, Babeș-Bolyai University

Work Experience:

- **April 2023 – June 2026: Scientific Research Assistant** at the NanoBioPhotonics and Laser Microspectroscopy Center, Interdisciplinary Research Institute in Bio-Nano-Sciences, Babeș-Bolyai University, Cluj-Napoca, Romania.
- **March 2021 – October 2022: Physicist** at the NanoBioPhotonics and Laser Microspectroscopy Center, Interdisciplinary Research Institute in Bio-Nano-Sciences, Babeș-Bolyai University, Cluj-Napoca, Romania.

Education:

- **October 2023 – present:** PhD student in Biophysics at the Biomolecular Physics Department, Faculty of Physics, Babeș-Bolyai University, Cluj-Napoca, Romania.
- **October 2021 – June 2023:** Master's in Biophysics and Medical Physics, Faculty of Physics, Babeș-Bolyai University, Cluj-Napoca, Romania.
- **October 2018 – June 2021:** Bachelor of Science in Medical Physics, Faculty of Physics, Babeș-Bolyai University, Cluj-Napoca, Romania.
- **September 2014 – June 2018:** Student at Colegiul National „George Cosbuc" (German School), Cluj-Napoca, Romania.

Research projects:

1. *Personalized paper-based plasmonic SERS/Thermoplasmonic nanosensor for portable detection (acronym: ThermoPlasSens)*, International Bilateral Cooperation Project Brancusi Romania – France, **PN-IV-P8-8.3-PM-RO-FR-2024-0144**, Project implementation period: 2024 – 2025 – key member

2. *Plasmon-mediated biology: Exploitation of plasmonics to investigate and enhance biological processes and application to biomedical issues (acronym: BioPlasmonics)*, **nr. 760037 of 23.05.2023, PNRR-C9-I8-CF-199/28.11.2023** – key member, research assistant.

3. *Ready to use flexible bandage, with synergistic photothermal and antimicrobial properties*, **PN-III-P2-2.1-PED-2021-3342**, UEFISCDI – key member, technician.

4. *Designing new plasmonic aptasensors for detection and monitoring of infections,* **PN-III-P4-ID-PCE-2020-11592**, UEFISCDI – key member, physicist.

5. *Theranostic microplatforms for multimodal therapy in human eye diseases, a new paradigm for biomedical applications*, **PN-III-P2-2.1-PED-2019-4558**, UEFISCDI – key member, technician.

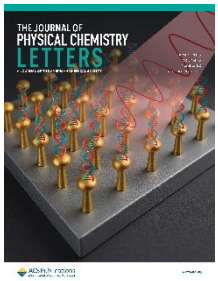
Scientific publications:

1. **Daria Stoia***, A. M. Craciun*, G. Chereches, O. Soritau, D. Maniu, S. Astilean, M. Lamy de la Chapelle, M. Focsan, *DNA-hybridization on gold nanospheres: a dual-fluorescence investigation of surface loading and strand length effects*, **Journal of Biomedical Optics**, 2026, 31, 6, 10.1117/1.JBO.31.6.064304 **(IF 2.9)**

2. **Daria Stoia***, A.-M. Hada*, S. Suarasan, M. Potara, S. Astilean, *Recent advances in plasmon-assisted optical sensing of inflammatory biomarkers*, **WIREs Nanomedicine & Nanotechnology**, 2026, 18, 1, 10.1002/wnan.70048 **(IF 8.2)**

3. A. M. Craciun, **Daria Stoia**, A. Azziz, S. Astilean, M. Focsan, M. Lamy de la Chapelle, *Investigation of local field enhancement near plain and shell-coated gold nanospheres for the optimization of surface enhanced spectroscopy*, **RSC Advances**, 2025, 15, 20848-20862, 10.1039/D5RA03633J **(IF 4.6)**

4. **Daria Stoia**, D. Maniu, M. Potara, A. M. Craciun, M. Edely, S. Grecu, A. Timar-Gabor, S. Astilean, M. Focsan, M. Lamy de la Chapelle, *Unveiling DNA Hybridization Dynamics via High-Sensitive SERS Detection: Insights into Conformational Changes and Oligonucleotides Length Effects*, **Journal of Physical Chemistry Letters** - Nature Index 2025, 16, 22, 5610–5618 10.1021/acs.jpclett.5c00600 **(IF 4.7, Front Cover of Journal of Physical Chemistry Letters)**



5. **Daria Stoia**, E. Fazio, C. Corsaro, A. Campu, O. Soritau, A. M. Craciun, G. Chereches, M. Focsan, G. Neri, A. Piperno, *A Graphene-Poly(methacrylic acid)-Gold bipyramids hybrid plasmonic nanocomposite for in vitro bioimaging and photothermal therapy*, **Journal of Materials Chemistry B** 2025, 13, 14, 4433-4446, 10.1039/D5TB00097A **(IF 5.8)**

6. **Daria Stoia**, L. De Sio, F. Petronella, M. Focsan, *Recent advances towards point-of-care devices for fungal detection: Emphasizing the role of plasmonic nanomaterials in current and future technologies*, **Biosensors and Bioelectronics** 255 (2024) 116243, 10.1016/j.bios.2024.116243 **(IF 10.5)**

7. **Daria Stoia**, M. Nistor, M. Suciu, R. Borlan, A. Campu, D. Rugina, D. Maniu, S. Astilean, M. Focsan, *NIR photothermal-activable drug-conjugated microcapsules for in vitro targeted delivery and release: An alternative treatment of diabetic retinopathy*, **International Journal of Pharmaceutics** 635 (2023) 122700, 10.1016/j.ijpharm.2023.122700 **(IF 5.8)**

8. **Daria Stoia**, R. Pop, A. Campu, M. Nistor, S. Astilean, A. Pintea, M. Suciu, D. Rugina, M. Focsan, *Hybrid polymeric therapeutic microcarriers for thermoplasmonic-triggered release of resveratrol*, **Colloids and Surfaces B: Biointerfaces** 220 (2022) 112915, 10.1016/j.colsurfb.2022.112915 **(IF 5.8)**

9. R. Borlan, **Daria Stoia**, L. Gaina, A. Campu, G. Marc, M. Perde-Schrepler, M. Silion, D. Maniu, M. Focsan, S. Astilean, *Fluorescent Phthalocyanine-Encapsulated Bovine Serum Albumin Nanoparticles: Their Deployment as Therapeutic Agents in the NIR Region*, **Molecules** 26 (2021) 4679, 10.3390/molecules26154679 **(IF: 4.927)**

10. R. Borlan, M. Focsan, M. Perde-Schrepler, O. Soritau, A. Campu, L. Gaina, E. Pall, B. Pop, O. Baldasici, C. Gherman, **Daria Stoia**, D. Maniu, S. Astilean, *Antibody Functionalized Theranostic Protein Nanoparticles for Synergistic Deep Red Fluorescence Imaging and Multimodal Therapy of Ovarian Cancer*, **Biomaterials Science** 9 (2021) 6183, 10.1039/d1bm01002f **(IF: 7.59)**

Patent applications:

- SmartWoundPatch – Smart dressings with thermoplasmonically enhanced antimicrobial activity *(ro. SmartWoundPatch – Pansamente inteligente cu activitate antimicrobiană amplificată termoplasmonic)* - **Daria Stoia**, F.-L. Zorila, R. Moisa (Stoica), I. Turcu, S. Astilean, M. Bacalum, M. Focsan, **National O.S.I.M Patent no. A100347**, 2024

Book chapters:

- **Daria Stoia**, M. Focsan, *Multifunctional Polymeric Microspheres for Targeted Delivery and NIR-Light Stimulated Release of the Therapeutic Molecule Avastin at Human Retina Level*, book chapter in Biotechnology and Human Enhancement, Present Research and Future Perspectives, Edited by Luciano De Sio and Eyup Kuntay Turmus, Springer Publishing, 79-110, DOI: 10.1007/978-94-024-2296-2, ISBN: 978-94-024-2295-5.

- F. Petronella, **Daria Stoia**, Y. Ziai, F. Zaccagnini, V. Scognamiglio, D. Maniu, C. Rinoldi, M. Focsan, A. Antonacci, F. Pierini, L. De Sio, *Plasmonic-based biosensors for the rapid detection of harmful pathogens*, book chapter in Novel Optical Materials, Edited by: Iam Choon Khoo, Francesco Simoni and Cesare Umeton, World Scientific Publishing, 155-194, DOI: 10.1142/9789811280603_0006, 2023, ISBN: 978-981-12-8059-7.

International summer schools:

- **The 12th Markus Pessa International Summer School "New Frontiers in Optical Technologies",** 11 – 16 Aug 2025, Tampere, Finland.

- **The 15th Greta Pifat-Mrzijak International School of Biophysics,** 26 – 30 Aug 2024, Split, Croatia.

- **The 15th International Summer School on N&N, OE & Nanomedicine (ISSON),** 3-10 July 2021, Thessaloniki, Greece.

International traineeships:

- **Scientific traineeship** – 1 month (01.04.2026 – 30.04.2026) with the project ***AURORA: Au-based Ultrastructure: Resolution and Optical Reconstruction via Advanced TEM Techniques*** during the Doctoral and post-doctoral visit program 2025 – 2026 Complex Systems Academy – Université Côte d'Azur, under Ing. Dr. Ileana Florea's coordination.
- **Scientific traineeship** – 3 weeks (06.10.2025 – 26.10.2025) at the University of Le Mans, France, under Prof. Dr. Marc Lamy de la Chapelle's coordination, supported by the Bourses France Excellence Roumanie Scholarship.
- **Scientific traineeship** – 3 weeks (08.02.2025 – 28.02.2025) at the University of Le Mans, France, under Prof. Dr. Marc Lamy de la Chapelle's coordination, supported by the Bourses France Excellence Roumanie Scholarship.
- **Scientific traineeship** – 3 weeks (27.11.2023 – 15.12.2023) at the University of Le Mans, France, under Prof. Dr. Marc Lamy de la Chapelle's coordination.
- **Erasmus traineeship** – 4 months (01.11.2022 – 28.02.2023) at the University of Messina, Messina, Italy, under Prof. Dr. Anna Piperno's coordination.

Specializations and Qualifications as Young Scientist:

- **November 2024: JRC Physical Research Infrastructures – Training and Capacity Building.** Selected for a specialized one-week training program at the European Commission's Joint Research Centre (JRC) in Ispra, Italy. The program focused on advanced characterization techniques for nanomedicine, including analytical ultracentrifugation, liquid chromatography, and transmission electron microscopy (TEM). Gained expertise in regulatory standards and preclinical assessments for innovative therapeutic nanoparticles, contributing to ongoing EU4Health-aligned research projects.
- **July 2024:** Training and Specialization Course on the MicroRaman Spectrometer – Confocal Raman Microscope, Horiba Xplora Raman equipment.
- **April 2024:** Training and Specialization Course on the QCM-D equipment (Quartz Crystal Microbalance with Dissipation monitoring) from Biolin Scientific.

International conferences:

1. **oral presentation** – **Daria Stoia**, I. Florea, M. Focsan – *„Thermoplasmonic Sensing on Calligraphy-Patterned Paper: A Gold Nanoparticle Study with Complementary LSPR and SERS Readouts"* – at **the 21st European Conference on the Spectroscopy of Biological Molecules (ECSBM 2026)**, 30 Aug – 3 Sept 2026, Cluj-Napoca, Romania – **awarded best oral presentation**.

2. **Daria Stoia**, M. Focsan – *„A Multimodal Paper-based Plasmonic Biosensor for Rapid and Multiplexed Biomarker Detection"* – at **the 9th International Conference on Bio-Sensing Technology**, 10 – 13 May 2026, Kuala Lumpur, Malaysia.

3. D. Ursa, **Daria Stoia**, A. Dinca, M. Focsan – *„Controlled End-to-End Plasmonic Coupling: L-Cysteine Mediated Gold nanoparticle Assembly for SERS and CD Applications"* – at **the 22nd International Conference in Chemistry, Chemical Engineering or STEM with applications in Chemistry & Chemical Engineering: Students for Students**, 22 – 25 April 2026, Cluj-Napoca, Romania.

4. **Daria Stoia**, M. Focsan – *„Dual-mode Paper-based Plasmonic Sensor: A Portable Solution for Next-Generation Diagnostics"* – at **the SPIE Photonics West International Conference**, 17 – 23 Jan 2026, San Francisco, California, USA.

5. **oral presentation – Daria Stoia**, M. Focsan – *„ThermoPlasSens: A Thermoplasmonic Paper-Based Biosensor for Multiplexed DNA Hybridization, microRNA, and Cancer Biomarker Detection"* – at **the 3rd International Conference on Advances in 3OM & Photonics Technologies**, 8 – 11 Dec 2025, Timisoara, Romania.

6. A. Holca, **Daria Stoia**, D. Maniu, A. Campu, S. Astilean, M. Focsan – *„Innovative Plasmonic Nanobiosensors in Biophotonics: From Biomarker Detection to Imaging and Therapy"* – at **the 3rd International Conference on Advances in 3OM & Photonics Technologies**, 8 – 11 Dec 2025, Timisoara, Romania.

7. **oral presentation - Daria Stoia**, A. Holca, R. Borlan, D. Ursa, C. Maxim, M. Lamy de la Chapelle, M. Focsan – *„ThermoPlasSens: A Multiplexed Paper-Based Plasmonic Biosensor Integrating SERS, LSPR, and Thermoplasmonic Readouts for DNA Hybridization Detection"* – at **the 13th International Conference on Advanced Vibrational Spectroscopy (ICAVS13) and the 5th International Conference on Enhanced Spectroscopy (ICES5)**, 30 Nov – 5 Dec 2025, Xiamen, China.

8. D. Ursa, **Daria Stoia**, M. Lamy de la Chapelle, M. Focsan – *„Plasmonic Calligraphy: A portable Multiplex Nanosensor for Ultrasensitive and Multimodal Biomolecule Detection"* – at **the 15th International Conference of Processed in Isotopes and Molecules**, 16 – 19 Sept 2025, Cluj-Napoca, Romania.

9. C. Rusu, **Daria Stoia**, A. Holca, M. Focsan – *„Tracking Protein Denaturation on Gold Nanoparticle Surfaces: Insights into Nano-Bio Interactions"* – at **the 15th International Conference of Processed in Isotopes and Molecules**, 16 – 19 Sept 2025, Cluj-Napoca, Romania.

10. **oral presentation – Daria Stoia**, A. Holca, S. Grecu. M. Focsan – *„Tunable Hybrid Microcapsules with Gold Nanoparticles for Photothermal Therapy"* – at **the 15th International Conference of Processed in Isotopes and Molecules**, 16 – 19 Sept 2025, Cluj-Napoca, Romania.

11. A. Azziz, M. Majdinasab, C. Arib, Q. Liu, **Daria Stoia**, M. Focsan, M. Edely, M. Lamy de la Chapelle – „*Detection, identification and structural study of biomolecules by Surface Enhanced Raman Spectroscopy*" - at **the 1st Carpathian Biophotonics Meeting (CMB 2025)**, 8 – 12 Sept 2025, Sinaia, Romania.

12. A. Campu, **Daria Stoia**, D. Maniu, S. Astilean, M. Lamy de la Chapelle, M. Focsan – *„Miniaturized Microfluidic Plasmonic Chip For Enhanced Biosensing"* – at **the 15th International Conference on Metamaterials, Photonic Crystals and Plasmonics (META 2025)**, 22 – 25 July 2025, Torremolinos, Spain.

13. A. Colnita, D. Marconi, I. Brezestean, A.-S. Tatar, N. E. Dina, I. Turcu, **Daria Stoia**, M. Focsan, F. Zorila, M. Bacalum – *„Monitoring Antimicrobial Effect of Peptides Using Nanostructured and Flexible SERS Sensing Platforms"* – at **the 15th European Biophysics Congress (EBSA2025)**, 30 June – 4 July 2025, Rome, Italy.

14. **Daria Stoia**, A. M. Craciun, M. Potara, M. Edely, D. Maniu, S. Astilean, M. Focsan, M. Lamy de la Chapelle – *„Sensitive Dual Detection of DNA Hybridization"* – at **the 35th Anniversary World Congress on Biosensors**, 19 – 22 May 2025, Lisbon, Portugal.

15. **Daria Stoia**, A. M. Craciun, M. Lamy de la Chapelle, M. Focsan – *„Dual-mode DNA detection and hybridization using gold nanoparticles: integrating label-free SERS and MEF to evaluate conformational changes"* – at **the SPIE Photonics West International Conference**, 25 – 30 Jan 2025, San Francisco, California, USA.

16. G. Neri, **Daria Stoia**, E. Fazio, C. Corsaro, M. Focsan, A. Piperno – *„Appraising the Efficiency of NIR-Responsive Hybrid Nanosystem based on Graphene, Poly(methacrylic acid) and Gold Bipyramids in Melanoma Cancer Cells"* – at **the SIFB-Italian Society of Photobiology-XXXV Annual Conference, Mediterranean Edition**, 2024.

17. **Daria Stoia**, A. M. Craciun, M. Lamy de la Chapelle, M. Focsan – *„Gold nanoparticle-mediated direct detection of unmodified DNA via surface-enhanced Raman spectroscopy: assessing reproducibility and conformational changes"* – at **the Single-Molecule Sensor and nanoSystems International Conference**, 28 – 30 Oct 2024, Paris, France.

18. **Daria Stoia**, M. Potara, M. Lamy de la Chapelle, M. Focsan – *„Advancing Biotechnology: Exploring DNA-Surface Interactions via Surface-Enhanced Raman Spectroscopy"* – at **the 10th Regional Biophysics Conference**, 26 – 30 Aug 2024, Split, Croatia.

19. **oral presentation** – **Daria Stoia** – *„New Plasmonic Nanosystems for Detection, Multimodal Therapy, and Biomedical Applications"* at the **Soft Materials/Biological Physics Talk Series**, organized by ASU Center for Biological Physics and CY Cergy University in Paris, 17 July 2024.

20. **oral presentation - Daria Stoia**, M. Nistor, M. Suciu, R. Borlan, A. Campu, D. Rugina, D. Maniu, S. Astilean, M. Focsan – *„Novel Hybrid Microcapsules for Targeted Delivery and Release of Therapeutic Molecules under NIR-Light Stimulation at Retina Level"* - at the **Advanced Research Workshop** (ARW) supported by NATO SPS Programme, 3 – 5 Oct 2023, San Felice del Circeo, Italy.

21. **Daria Stoia**, M. Bacalum, I. Turcu, S. Astilean, M. Focsan – *„Synergistic Phototherapeutic and Antimicrobial Smart Wound Patch: The Next Generation Approach for Efficient Wound Treatment"* – at the **Advanced Research Workshop** (ARW) supported by NATO SPS Programme, 3 – 5 Oct 2023, San Felice del Circeo, Italy.

22. **oral presentation** - **Daria Stoia**, R. Borlan, A. Campu, F. Zorila, M. Alexandru, M. Raileanu, M. Bacalum, M. Focsan – *„Novel Smart Wound Patch: The Next Generation of Wound Dressing"* – at the **14th International Conference of Processes in Isotopes and Molecules** (PIM2023), 19 – 22 Sept 2023, Cluj-Napoca, Romania.

23. **oral presentation** - **Daria Stoia**, M. Nistor, M. Suciu, R. Borlan, A. Campu, D. Maniu, S. Astilean, M. Focsan – *„Novel Hybrid Microcapsules for Targeted Delivery and NIR-Light Stimulated Release of Therapeutic Molecules at Retina Level"* –at the **6th Grandmaster Early-Career Workshop in Physics (GEWP) 2023**, 3 – 8 Sept 2023, Cluj-Napoca, Romania.

24. **Daria Stoia,** M. Nistor, A. Campu, A. Vulpoi, M. Suciu, D. Rugina, S. Astilean, M. Focsan **–** *"NIR fluorescent hybrid microcapsules as efficient delivery agents for controlled in vitro Avastin drug release"* **–** at the **4th International Conference on Materials: Advanced and Emerging Materials** (ICM 2022), 19 – 21 Oct 2022, Barcelona, Spain.

25. R. Pop, M. Nistor, **Daria Stoia**, A. Campu, M. Focsan, D. Rugina, A. Pintea, oral presentation *"Multimodal resveratrol-delivery theranostic microsystem for the management of diabetic retinopathy"* – at the **21st International Conference "Life Science for Sustainable Development"**, 15 – 17 Sept 2022, Cluj-Napoca, Romania.

26. R. Pop, M. Nistor, **Daria Stoia**, A. Campu, M. Focsan, A. Pintea, D. Rugina – *"Resveratrol theranostic microsystem designed for in vitro laser-induced treatment in diabetic retinopathy"* – at the **8th EuChemS Chemistry Congress**, 28 Aug – 1 Sept 2022, Lisbon, Portugal.

27. R. Pop, M. Nistor, **Daria Stoia**, A. Campu, M. Focsan, S. Tripon, L. Barbu, A. Pintea, D. Rugina – *"Laser-activated release of resveratrol from polymeric microcapsules for diabetic retinopathy therapy: an in vitro approach"* – at the **25th IUBMB Congress, 46th FEBS Congress, 15th PABMB Congress**, 9 – 14 July 2022, Lisbon, Portugal.

28. **Daria Stoia,** M. Nistor, D. Rugina, M. Focsan – *"Polymeric microcapsules for targeted and controlled delivery of therapeutic molecules at retina level"* **-** at the **6th edition of International Conference on Analytical and Nanoanalytical Methods for Biomedical and Environmental Science** (IC-ANMBES 2022), 8 - 10 June 2022, Brasov, Romania.

29. R. Pop, M. Nistor, **Daria Stoia**, R. Borlan, A. Campu, A. Pintea, M. Focsan, D. Rugina – *"Theranostic microcapsules for local resveratrol delivery and its potential laser release in retina cells*" **-** at the **20th International Conference "Life Science for Sustainable Development"**, 23 – 24 Sept 2021, Cluj-Napoca, Romania.

30. **Daria Stoia**, R. Pop, M. Nistor, R. Borlan, D. Rugina, M. Focsan – *"Resveratrol-therapeutic agent delivered and localized via fluorescent polyelectrolyte microsystems inside living cells"* - at the **18th International Conference on Nanoscience & Nanotechnologies (NN21**), 6 - 9 July 2021, Thessaloniki, Greece.

National conferences:

1. **oral presentation** – **Daria Stoia**, I. Florea, M. Focsan, *"Plasmonic Calligraphy on Paper: Developing a Thermoplasmonic Biosensor for Cancer-Related Biomarkers"*, at **the 2nd**

edition of Scientific Communication Session of the Faculty of Physics Students, 22 May 2026, Cluj-Napoca, Romania.

2. D. Ursa, **Daria Stoia**, A. Dinca, M. Focsan, *"Plasmon-Enhanced Detection of PolyA-PolyT DNA Hybridization through Chiroptical and SERS Signatures"*, at **the 2nd edition of Scientific Communication Session of the Faculty of Physics Students**, 22 May 2026, Cluj-Napoca, Romania.

3. C. Rusu, **Daria Stoia**, I. Florea, M. Focsan, *"Protein Corona Stability on Gold Nanoparticles: Structural and Photothermal Characterization under Environmental Stress"*, at **the 2nd edition of Scientific Communication Session of the Faculty of Physics Students**, 22 May 2026, Cluj-Napoca, Romania.

4. C. Rusu, **Daria Stoia**, M. Focsan, *"Monitoring the Denaturation of Proteins Adsorbed on the Surface of Gold Nanoparticles: Advancing the Understanding of Nano-Bio Interfaces"*, at **Cluj Innovation Days**, 29 – 30 May 2025, Cluj-Napoca, Romania.

5. R. F. Ghiman, M. Nistor, **Daria Stoia**, M. Focsan, D. Rugina, S. Astilean, A. Pintea – *"Polyelectrolyte microcapsules as delivery vehicles for therapeutic molecules"* - at the **Nanotek - Nanomedicine conference designed for students**, 16 - 17 Oct 2020, Cluj-Napoca, Romania.

Volunteering activities & Others:

- **2026: Organizing member** of *the 21st European Conference on the Spectroscopy of Biological Molecules* (ECSBM 2026), hosted by the Faculty of Physics, Babes-Bolyai University, 30 Aug – 3 Sept 2026, Cluj-Napoca, Romania.
- **2025: Active member** in the *Electromagnetic Radiation in Advanced Techniques for Technological Progress and Resilience Workshop*, during the 6th edition of Smart Diaspora Conference, 4 – 7 Nov 2025, Cluj-Napoca, Romania.
- **2025 – 2026:** Mentor of bachelor's students Carmen-Andreea Maxim and Daria Ursa during their bachelor's degree, Faculty of Physics, Physics Department, Babes-Bolyai University.
- **2025 – 2026:** Mentor of master's student Catalina Rusu during her master's degree, Faculty of Physics, Biophysics and Medical Physics Department, Babes-Bolyai University.
- **2024 – 2025:** Mentor of bachelor's students Iulia Cruceru and Rebeca Moldovan during their bachelor's degree, Faculty of Physics, Medical Physics Department, Babes-Bolyai University.
- **2025:** UBB Master of Science Day – representing the Master's in Biophysics and Medical Physics within the Faculty of Physics.
- **2024:** Pentagon of Physics Faculties – the Nanobiophotonics and Laser Microspectroscopy Center presentation within the Interdisciplinary Research Institute in Bionanosciences.
- **2024:** STEM Days Emerson – volunteering within the School of Experiments Association (*ro: Asociatia Scoala de Experimente*).

- **2024:** Saturday of Experiments, Babes-Bolyai University – volunteering within the Faculty of Physics.
- **2023-2024:** Mentor of bachelor’s student Catalina Rus during her bachelor's degree, Faculty of Physics, Medical Physics Department, Babes-Bolyai University.
- **2023:** Games of Science attendance, British Council Romania event.
- **2023:** ARGO Scientific Festival attendance, Faculty of Physics, Babes-Bolyai University.