

ANEXA 5.1

(Pentru următoarele cadre didactice se adaugă Anexele 5.2, 5.3. etc.)

Universitatea Babeș Bolyai
Facultatea de Fizică
Departamentul de Fizică Biomoleculară
Conf. dr. Dana Maniu

L I S T A

lucrărilor științifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

Studiul unor proprietăți fizice ale unor sticle oxidice cu ioni de tranziție, D. Maniu, 127 pag, 1999

B. Cărți și capitole în cărți publicate în ultimii 10 ani

1. Practica în specialitatea Fizică tehnologică (cap 11), pp 147-157, D. Maniu
Îmbunătățirea interacțiunii universității cu mediul de afaceri, Vol. 3,
Ed. Universității Babeș-Bolyai, ISBN 978-606-94098-0-0 (2015), Coordonatori: D. T. Lazar, V.A. Veres, A. Baran,
2. Advanced nanostructures for microbial contaminants detection by means of spectroscopic methods (cap. 8), pp 347-384; (All authors contributed equally to this work.)
M. Potara, A. Campu, D. Maniu, M. Focsan, I. Botiz, S. Astilean
Book: Advanced Nanostructures for Environmental Health; Micro and Nano Technologies, 1st Edition, Editors: L. Baia, Z. Pap, K. Hernadi, M. Baia, ISBN: 9780128158821, Ed. Elsevier, pp 347-384, (2020); <https://doi.org/10.1016/B978-0-12-815882-1.00008-2>, WOS: 000552536900008, 978-0-ISBN: 12-815883-8978-0-12-815882-1
3. Plasmonic-based Biosensors for the Rapid Detection of Harmful Pathogens (cap 6), pp 155-194
Francesca Petronella, Daria Stoia, Yasamin Ziai, Federica Zaccagnini, Viviana Scognamiglio, Dana Maniu, Chiara Rinoldi, Monica Focsan, Amina Antonacci, Filippo Pierini, and Luciano De Sio
BOOK: Optical Materials and Applications vol 1, Novel Optical Materials, pp. 155-194 (2023), https://doi.org/10.1142/9789811280603_0006
Editori: Iam Choon Khoo, Francesco Simoni, Cesare Umeton, ISBN: 978-981-12-8059-7, Ed. World Scientific

C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani

1. Surface passivation of carbon nanoparticles with p-phenylenediamine towards photoluminescent carbon dots
A. M. Craciun, A. Diac, M. Focsan, C. Socaci, K. Magyari, **D. Maniu**, I. Mihalache, L. M. Veca, S. Astilean and A. Terec
RSC Advances, Volume: 6, Issue: 62, Pages: S6944-S6951 (2016) 3,108
2. Doxorubicin-Incorporated Nanotherapeutic Delivery System Based on Gelatin-Coated Gold Nanoparticles: Formulation, Drug Release, and Multimodal Imaging of Cellular Internalization
S. Suarasan, M. Focsan, M. Potara, O. Soritau, A. Florea, **D. Maniu**, and S. Astilean

- ACS Appl. Mater. Interfaces, Volume: 8, Issue: 35, Pages: 22900-22913, (2016) 7,504
- 3.** A simple and efficient design to improve the detection of biotin-streptavidin interaction with plasmonic nanobiosensors.
Focsan M, Campu A, Craciun AM, Potara M, Leordean C, **Maniu D**, Astilean S
Biosens Bioelectron., 86, 728-735, (2016). 7,47
- 4.** Flexible and Tunable 3D Gold Nanocups Platform as Plasmonic Biosensor for Specific Dual LSPR-SERS Immuno-Detection
Focsan, M., Craciun, A. M., Potara, M., Leordean C., Vulpoi A., **Maniu. D**, Astilean, S.
Scientific Reports, Volume: 7, Article Number: 14240, (2017), DOI: 10.1038/s41598-017-14694-1, ISSN, 2045-2322 4,122
- 5.** Gold NanoBipyramids Performing as Highly Sensitive Dual-Modal Optical Immunosensors
A. Campu, F. Lerouge, D. Chateau, F. Chaput, P. Baldeck, S. Parola, **D. Maniu**, AM Craciun, A. Vulpoi, S. Astilean, and M. Focsan
Anal. Chem., 90(14),8567-857, (2018) 6,042
- 6.** Chitosan-capped gold nanoparticles impair radioresistant glioblastoma stem-like cells
M. Aldea, M. Potara, O. Soritau, I.S. Florian, A. Florea, T. Nagy-Simon, V. Pileczki, I. Brie, **D. Maniu**, G. Kacso
JOURNAL OF BUON, 23(3), 800-813, (2018) 1,379 Q4
- 7.** Multimodal Biosensing on Paper-Based Platform Fabricated by Plasmonic Calligraphy Using Gold Nanobipyramids Ink
A. Campu, L. Susu, F. Orzan, **D. Maniu**, A.M. Craciun, A. Vulpoi, L. Roiban, M. Focsan, S. Astilean
Front. Chem. 7:55. Vol. 7, Art. 55, (2019), ISSN: 2296-2646 3.782 Q2
- 8.** Surface passivation of carbon nanoparticles with 1,2-phenylenediamine towards photoluminescent carbon dots
A. Crisan, A.M. Craciun, I. Mihalache, M. Focsan, C. Socaci, **D. Maniu**, S. Astilean, M. Veca, A. Terec,
Revue Roumaine de Chimie, 65(6), 559-566 (2020) Q4
DOI: 10.33224/rrech.2020.65.6.05 0.14
- 9.** Design of fluorophore-loaded human serum albumin nanoparticles for specific targeting of NIH: OVCAR3 ovarian cancer cells
R Borlan, AS Tatar, O Soritau, D Maniu, G Marc, A Florea, M Focsan, S Astilean
Nanotechnology 31 (31), 315102, (2020), doi: 10.1088/1361-6528/ab8b90. 3.874 Q1
- 10.** Treatment beyond progression in metastatic colorectal cancer: to double or not to double the dose of bevacizumab?
Bochis OV, Vlad C, Cainap C, Achimas-Cadariu P, Sur D, Havasi A, Vidrean A, Muresan A, Piciu A, Bota M, Constantin AM, Tat T, **Maniu D**, Crisan O, Cioban CV, Balacescu O, Coza O, Balacescu L, Marta MM, Cainap S.
Journal of BUON, Vol: 25, Issue: 2, Pages: 875-883, (2020), 2.533, Q4
Accession Number: WOS:000562380000013
- 11.** Doubling the Dose of Bevacizumab Beyond Progression in Metastatic Colorectal Cancer – the Experience of a Tertiary Cancer Center,
C. Căinap, O.V. Bochiș, C. Vlad, R. Popita, P. Achimaș-Cadariu, A. Havasi, A. Vidrean, A. Dranca, A. Piciu, M. Bota, A.M. Constantin, T. Tat, **D. Maniu***, O. Crișan, C.V. Cioban, O. Bălăcescu, O. Coza, L. Bălăcescu, M.M. Marta, M. Bota, S. Cainap
Frontiers in Pharmacology, section Pharmacology of Anti-Cancer Drugs, vol. 12, art. nr. 487316, (2021), (*These authors have contributed equally to this work and share first authorship), WOS: 000632404800001, DOI: 10.3389/fphar.2021.487316 5.988, Q1
- 12.** Interventional NIR fluorescence imaging of cancer: Review on next generation of dye loaded protein-based nanoparticles for real-time feedback during cancer surgery

R. Borlan, M. Focsan, **D. Maniu**, S. Astilean,
International Journal of Nanomedicine, 16, 2147–2171, (2021).
DOI: 10.2147/IJN.S295234

7.033,

Q1

13. Partnering bevacizumab with irinotecan as first line-therapy of metastatic colorectal cancer improves progression free survival-A retrospective analysis

Calin Cainap, Rodica Ana Ungur, Ovidiu-Vasile Bochis, Patriciu Achimas, Catalin Vlad, Andrei Havasi, Andreea Vidrean, Anca Farcas, Tiberiu Tat, Alexandra Gherman, Andra Piciu, Madalina Bota, Anne-Marie Constantin, Laura Ancuta Pop, **Dana Maniu**, Ovidiu Crisan, Cosmin Vasile Cioban, Ovidiu Balacescu, Ovidiu Coza, Loredana Balacescu, Monica Mihaela Marta, Eleonora Dronca, Simona Cainap

PloS one 16(4): e0248922, (April 2021), DOI: 10.1371/journal.pone.0248922 3.752, Q2

14. Prevalence of Underweight, Overweight and Obesity in School-Aged Children in the Urban Area of the Northwestern Part of Romania

Tudor Lucian Pop*, **Dana Maniu***, Daniela Rajka, Cecilia Lazea, Gabriel Cismaru, Adrian Stef and Simona Sorana Căinap (*Both authors had equal contribution as the first authors)

Int. J. Environ. Res. Public Health (2021), 18, 5176 (16 p). 4.614, Q1

DOI: 10.3390/ijerph18105176

15. Ultrasensitive SEIRA detection using gold nanobipyramids: Toward efficient multimodal immunosensor

A Campu, F Lerouge, **D Maniu***, K Magyari, M Focsan* (*Corresponding author)

Journal of Molecular Structure 1246, 131160, 2021, 3.841, Q3

DOI: 10.1016/j.molstruc.2021.131160

16. Fluorescent Phthalocyanine-Encapsulated Bovine Serum Albumin Nanoparticles: Their Deployment as Therapeutic Agents in the NIR Region

R Borlan, D Stoia, L Gaina, A Campu, G Marc, M Perde-Schrepler, M. Silion, **D. Maniu**, M. Focsan, S. Astilean

Molecules 26 (15), 4679, 2021, DOI: 10.3390/molecules26154679 4.927, Q2

17. Antibody Functionalized Theranostic Protein Nanoparticles for Synergistic Deep Red Fluorescence Imaging and Multimodal Therapy of Ovarian Cancer.

R. Borlan, M. Focsan, M. Perde-Schrepler, O. Soritau, A. Campu, L. Gaina, E. Pall, B. Pop, O. Baldasici, C. Gherman, D. Stoia, **D. Maniu**, S. Astilean

Biomater. Sci., 9, 6183-6202, Issue 18, 2021, DOI: 10.1039/D1BM01002F 7.59, Q1

18. NIR photothermal-activable drug-conjugated microcapsules for in vitro targeted delivery and release: An alternative treatment of diabetic retinopathy,

Daria Stoia, Madalina Nistor, Maria Suciuc, Raluca Borlan, Andreea Campu, Dumitrita Rugina, **Dana Maniu**, Simion Astilean, Monica Focsan,

International Journal of Pharmaceutics, Vol 635, 2023, 122700, ISSN 0378-5173, DOI: 10.1016/j.ijpharm.2023.122700 6.51, Q1

19. Albumin nanoparticles with tunable ultraviolet-to-red autofluorescence for label-free cell imaging and selective biosensing of copper ion

Raluca Borlan, Olga Soritau, **Dana Maniu**, Alexandru-Milentie Hada, Adrian Florea, Simion Astilean, Monica Focsan

International Journal of Biological Macromolecules, 242 (2023) 125129

DOI: 10.1016/j.ijbiomac.2023.125129, 31 May 2023, ISSN 0141-8130 8.025, Q1

20. Gelatin-assisted fabrication of reduced NanoGraphene Oxide for dual-modal imaging of melanoma cells

Vlad Cucuiet, Maria Iliut, Monica Potara, Klara Magyari, Septimiu Tripon, Olga Soritau, **Dana Maniu**, Simion Astileana, Monica Focsan

Colloids and Surfaces B: Biointerfaces, 231 (2023) 113546 5.8, Q1

21. Anthracycline's Effects on Heart Rate Variability in Children with Acute Lymphoblastic Leukemia: Early Toxicity Signs—Pilot Study
DR Lazar, S Cainap, **D Maniu**, C Blag, M Bota, FL Lazar, A Achim, M C Colceriu, M. Zdrengha
Journal of Clinical Medicine 12 (22), 7052

4.96 Q1

22. Portable Microfluidic Plasmonic Chip for Fast Real-Time Cardiac Troponin I Biomarker Thermoplasmonic Detection

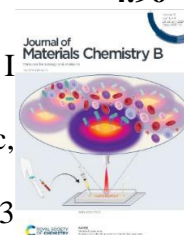
A. Campu, I. Muresan, M. Potara, D. Lazar, L. Lazar, S. Cainap, D. M. Olinic,

D. Maniu, S. Astilean and M. Focsan,

J. Mater. Chem. B, 2023, DOI: 10.1039/D3TB02190D, November 2023

(Front cover of J Mat Chem B)

7.57 Q1



23. Plasmon-enhanced photocatalysis: New horizons in carbon dioxide reduction technologies

Madalina Tudor, Raluca Borlan, **Dana Maniu**, Simion Astilean, Marc Lamy de la Chapelle, Monica Focsan,

Science of the Total Environment, 932, 2024, 172792, 14 pg

DOI: 10.1016/j.scitotenv.2024.172792

9.8 Q1

24. Dual-Modal Near-Infrared Organic Nanoparticles: Integrating Mild Hyperthermia Phototherapy with Fluorescence Imaging,

Raluca Borlan, Madalina Tudor, Olga Soritau, Adrian Florea, Eموke Pall, Bogdan Pop, **Dana Maniu**, Simion Astilean, Monica Focsan

International Journal of Nanomedicine, 2024, vol. 19, 9071-9099, DOI: 10.2147/IJN.S472882

6.6 Q1

25. The Effects of Pediatric Acute Lymphoblastic Leukemia Treatment on Cardiac Repolarization

Diana R. Lazar, Simona Cainap, Florin Leontin Lazar, **Dana Maniu**, Cristina Blag, Madalina Bota, Marius C. Colceriu, Mihnea Zdrengha

Children, 2024, 11, 1158, 14 pages,

DOI: 10.3390/CHILDREN11101158., WOS:0013425998000012.0.....Q2..

26. Graphene-mediated surface enhanced Raman spectroscopy for DNA Detection&hybridization: Breakthroughs and challenges

Vlad Cucuiet, **Dana Maniu**, Simion Astilean, Marc Lamy de la Chapelle, Monica Focsan

Biosensors and Bioelectronics 286 (2025) 117610,

IF 2024: 10.7 Q1

DOI: 10.1016/j.bios.2025.117610

27. Probing the Local Field Enhancement Using SERS Detection of DNA Strands with Different Lengths and Grafting Strategies on Graphene Oxide Plasmonic Nanoplatforms

Vlad Cucuiet, **Dana Maniu**, Ana Maria Craciun, Septimiu Tripon, Simion Astilean, Marc Lamy de la Chapelle*, Monica Focsan*

The Journal of Physical Chemistry Letters, 2025, Vol 16/Issue 2, pag 435-442, IF: 5,7 Q1

DOI: 10.1021/acs.jpcllett.4c02529

28. Unveiling DNA Hybridization Dynamics via High-Sensitivity SERS Detection: Insights into Conformational Changes and Oligonucleotide Length Effects

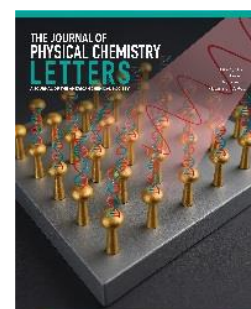
Daria Stoia, **Dana Maniu**, Monica Potara, Ana-Maria Craciun, Mathieu Edely, Serban Grecu, Alida Timar-Gabor, Simion Astilean, Monica Focsan*, Marc Lamy de la Chapelle*

The Journal of Physical Chemistry Letters, 2025, 16, 22, pag 5610–5618,

DOI: 10.1021/acs.jpcllett.5c00600

IF: 5,7 Q1

(Nature index, Front cover of J. Phys. Chem. Lett.)



29. Exploring the baseline cardiac function and its correlation with risk stratification in children diagnosed with acute lymphoblastic leukemia

Diana R. Lazar, **Dana Maniu**, Florin-Leontin Lazar, Cristina Blag, Madalina Bota, Mihnea Zdrengea, Simona Cainap

Annals of Hematology, 2025, 104(8), 4157-4164.

IF: 3.0 Q2

<https://doi.org/10.1007/s00277-025-06523-7>

30. SERS detection of DNA hybridization on a graphene oxide plasmonic nanoplatform: Influence of DNA sequence length

Cucuiet V, **Maniu, D**, Astilean S, de la Chapelle ML, Focsan M,

Applied Physics Letters, 2025, Vol 127 Issue 6, Nr. art. 063701, DOI: 10.1063/5.0288224

(Nature index)

3.6 Q2

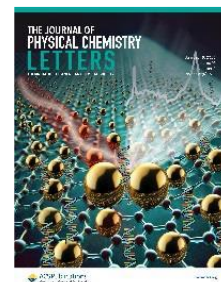
31. Probing the Local Field Enhancement Using SERS Detection of DNA Strands with Different Lengths and Grafting Strategies on Graphene Oxide Plasmonic Nanoplatfroms

V. Cucuiet, **D. Maniu**, A.M. Craciun, S. Tripton, S. Astilean, M. Lamy de la Chapelle, M. Focsan,

J. Phys. Chem. Lett., 16, 2025, 435–442,

IF 4.6 Q1

(Nature index Front cover of *J. Phys. Chem. Lett.*)



32. Ag Nanoparticles for Plasmon-Driven Conversion of pATP to DMAB under LED Excitation

Hada AM, Grecu S, Timar-Gabor A, **Maniu D**, Lamy de la Chapelle M, Focsan M

ACS Appl. Nano Mater. 2025, 8, 51, 24453–24465, <https://doi.org/10.1021/acsnm.5c04622>

5.5 Q2

D. Lucrări publicate în ultimii 10 anii în reviste și volume de conferințe cu referenți (neindexate)

- Reviste

- Selecție cu maximum 20 lucrări în volume de conferințe

1. 3D Flexible and Tunable Plasmonic Platforms for Optical Biosensing,

Focsan M., Potara M., Leordean C., Craciun A-M., Maniu D., Astilean S.,

META 2016, 7th International Conference on Metamaterials, Photonic Crystals and Plasmonics, Editor: Said Zouhdi, p 1-2, 2016

2. Plasmonic Nanomaterials: From Fabrication to Functional Applications in Nanomedicine

S. Astilean, M. Potara, M. Focsan., T. Simon, S. Suarasan, A. Gabudean, S. Boca-Farcu, C. Farcu, D. Maniu,

3-rd International Workshop on Materials Physics, Bucharest, Mai 29-30, 2018, Oral presentation.

3. Designing multifunctional plasmonic nanoplatfroms for applications in nanomedicine,

S. Astilean M. Potara, M Focsan, Nagy-Simon Timea, Gabudean Ana, Suarasan Sorina, Boca-Farcu Sanda, Campu Andreea, Maniu Dana, Farcu Cosmin,

The Fifth Edition of International Conference on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences "IC-ANMBES 2018", 23rd-25th May 2018, Brasov, Romania. Oral presentation

4. Indocyanine Green-Loaded Protein Nanoparticles for Near Infrared Imaging and Targeting of Ovarian Cancer Cells

Raluca Borlan, Andra-Sorina Tatar, Dana Maniu, Olga Sorițau, Eva Fischer-Fodor, Monica Focșan, Patriciu Achimaș-Cadariu, Simion Aștilean,

European Conference on Spectroscopy of Biological Molecules,,Dublin, August 19-22, 2019, poster presentation

5. Sinteza și caracterizarea spectroscopică a unor nanoparticule proteice încărcate cu verde de indocianină pentru aplicații biomedicale,,

Raluca Borlan, Andra-Sorina Tatar, Olga Sorita, Dana Maniu, Monica Focsan, Simion Astilean,

Conferința națională a studenților doctoranzi, București, Septembrie 26-28, 2019, oral presentation

6. Designing Versatile Plasmonic-Based Nanoplatforms for Applications in Nanomedicine”,

S. Astilean, M. Potara, T. Simon, S. Suarasan, M. Focsan, A. Craciun, A. Campu, S. Boca-Farcau, C. Farcau, D. Maniu.

5th International Workshop on Nano- and Biophotonics IWNBP, 22-27 September 2019, Saint Nectaire, France, Book of abstract pag 41, Invited.

7. Design of protein-based nanoparticles loaded with fluorescent dyes for biomedical imaging of ovarian cancer cells,

Raluca Borlan, Andra-Sorina Tatar, Olga Soritau, Dana Maniu, Monica Focsan, S. Astilean

Conferința națională a studenților doctoranzi, Iasi, 21-22 Octombrie, 2020 - prezentare orală

8. Portable Plasmonic Nanochip for Fast Cardiac Troponin Biomarker Detection,

Ilinca Muresan, Andreea Campu, Diana Lazar, Simona Cainap, Florin Lazar, Simion Astilean, Dana Maniu, Monica Focsan,

18th International Conference on Nanosciences & Nanotechnologies (NN21), 6-9 July 2021, Thessaloniki, Greece. poster

9. Novel hybrid microcapsules for targeted delivery and release of therapeutic molecules under NIR-light stimulation at retina level

D. Stoia, M. Nistor, M. Suciu, R. Borlan, A. Campu, D. Rugina, D. Maniu, S. Astilean, M. Focsan,

Advanced Research Workshop (ARW) Biotechnology and Human Enhancement: Present Research and Future Perspectives, 3 – 5 October 2023, San Felice Circeo, Latina, Italy, Oral Presentation

10. Novel hybrid microcapsules for targeted delivery and NIR-light stimulated release of therapeutic molecules at retina level,

D. Stoia, M. Nistor, M. Suciu, R. Borlan, A. Campu, D. Maniu, S. Astilean, M. Focsan,

6th Grandmaster Early-Career Workshop in Physics (GEWP2023), 3 – 8 September 2023, Cluj-Napoca, Romania, Oral Presentation

11. Portable microfluidic plasmonic chip for fast real-time cardiac troponin I biomarker detection

A. Campu, I. Muresan, M. Potara, D. R. Lazar, F. L. Lazar, S. Cainap, D. Maniu, S. Astilean, M. Focsan,

META 2023 – 13th International Conference on Metamaterials, Photonic Crystals and Plasmonics, 18 – 21 July 2023, Paris, France, Invited Lecture

12. Fluorescent nanoparticles decorated with ovarian cancer-specific ligands as theranostic nanoagents for the deep red interventional imaging and multimodal therapy of cancer,

Borlan Raluca-Andra, Focsan Monica-Olivia, Perde-Schrepler Maria, Gaina Ioana-Luiza, Maniu Dana, Astilean Simion

International school of nanomedicine Workshop: advanced nano- and micro-structured materials for medical applications, 20-25 iulie 2022, Trapani, Italia

E – Brevete (pentru întreaga activitate)

Data:

08 ianuarie 2026

Semnătura:

