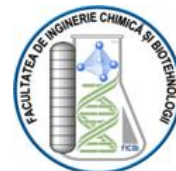




Universitatea Națională de Știință și Tehnologie
POLITEHNICA București

Facultatea de Inginerie Chimică și Biotehnologii



LISTA LUCRĂRILOR ELABORATE

I. TEZA DE DOCTORAT (T)

„Sisteme nanostructurate magnetice cu aplicații în sinteza de peptide și în electronică” - 2020, conducător doctorat: Prof. dr. ing. Liane Gloria Raluca STAN – Universitatea POLITEHNICA București

II. ALTE MATERIALE PUBLICATE (D)

D - Alte lucrări publicate: capitole publicate în volume colective, capitole teoretice redactate, sisteme de laborator funcționale

D1. C. Ravariu, D. Ursutiu, D. Mihaiescu, **A. Moroșan**, M. Tanase, T. Tsiatsos, (2021) *New Era of the Nano-Electronic Devices – One of the Most Adaptive Learning Areas for the Next Period*. In: Auer M.E., Tsiatsos T. (eds) *Internet of Things, Infrastructures and Mobile Applications*. IMCL 2019. *Advances in Intelligent Systems and Computing*, vol 1192. Springer, Cham., pp. 25–35. https://doi.org/10.1007/978-3-030-49932-7_3, WOS:000772212200003, ISBN: 978-3-030-49932-7

D2. **A. Moroșan**, A. M. Croitoru, G. Dolete, A. Spoială, D. Fikai, A. Fikai, M. C. Chifiriuc, (2021) *Nanotechnologies - A Modern Approach against the Development of Bacterial Resistance*. In: *Importance & Applications of Nanotechnology*, Austin Publishing Group. Vol. 1, Chapter 3, pp. 39-48.

III. ARTICOLE / STUDII IN EXTENSO PUBLICATE (R,V)

III.1. Ris – Articole publicate în reviste de specialitate de circulație internațională recunoscute cotate ISI Thomson Reuters

Ris1. **A. Moroșan**, D. E. Mihaiescu, D. Istrati, G. Voicu, A. Fudulu, R. Stan, *Polar shell magnetic nanostructured systems for heterogeneous nanophase reactions*, U.P.B. Sci. Bull, 2018, 80 (3), 53-64, WOS:000440890800005, **IF2023=0.3 Q4**, ISSN 1454-2331

Ris2. **A. Morosan**, D. E. Mihaiescu, D. Istrati, G. Voicu, M. Radu, A. Hanganu, R. Stan, *Functionalized silica shell magnetic nanoparticles for nanophase peptide synthesis*

- applications*, Microporous and Mesoporous Materials, 2019, 286, 45–56. DOI: 10.1016/j.micromeso.2019.05.018 (premiat PRECISI-2019), WOS:000472691400006, **IF2023=4.8 Q1**, ISSN:1387-1811
- Ris3.** C. Ravariu, D. E. Mihaiescu, **A. Morosan**, D. Istrati, B. Purcareanu, R. Cristescu, R. Trusca, B. S. Vasile, *Solution for green organic thin film transistors: Fe₃O₄ nano-core with PABA external shell as p-type film*, Journal of Materials Science: Materials in Electronics, 2020, 31, 3063-3073. DOI: 10.1007/s10854-019-02851-3 (premiat PRECISI-2020), WOS:000514597300034, **IF2023=2.8 Q2**, ISSN:0957-4522
- Ris4.** C. Ravariu, D. E. Mihaiescu, **A. Morosan**, V. Placinta, *New steps for advancing the Nothing On Insulator Triode 3nm gap and preliminary expanded technology*, Romanian Journal of Information Science and Technology, 2020, 23, 127-139, WOS:000532321500002, **IF2023=3.7 Q2**, ISSN:1453-8245
- Ris5.** C. Ravariu, D. E. Mihaiescu, **A. Morosan**, L. G. Alecu, D. Istrati, *Gated resistors with copper phthalocyanine films*, Journal of Optoelectronics and Advanced Materials, 2020, 22, 171-175, WOS:000545315500012, **IF2023= 0.576 Q4**, ISSN:1454-4164
- Ris6.** C. Ravariu, D. E. Mihaiescu, **A. Morosan**, B. S. Vasile, B. Purcareanu, *Sulpho-Salicylic Acid Grafted to Ferrite Nanoparticles for n-Type Organic Semiconductors*, Nanomaterials, 2020, 10, 1787; DOI:10.3390/nano10091787 (premiat PRECISI-2020), WOS:000581280600001, **IF2023=4.4 Q1**, eISSN:2079-4991
- Ris7.** C. Ravariu, D. E. Mihaiescu, **A. Morosan**, A. Srinivasulu, *Electrical characterization of a pseudo-mos transistor with organic thin film produced by nanotechnologies*, Romanian Journal of Information Science and Technology, 2021, 24, 28-36, WOS:000636230100002, **IF2023=3.7 Q2**, ISSN:1453-8245
- Ris8.** E. Danila, R. Stan, M. A. Kaya, G. Voicu, M. M. Marin, **A. Moroşan**, I. Titorencu, R. Țuțuianu, *Valorization of Cyprinus Carpio Skin for Biocompatible Collagen Hydrolysates with Potential Application in Foods, Cosmetics and Pharmaceuticals*, Waste and Biomass Valorization, 2021, DOI: 10.1007/s12649-021-01569-w, WOS:000692433500002, **IF2023= 2.6 Q3**, ISSN:1877-2641
- Ris9.** D. Istrati, **A. Moroşan**, R. Stan, B.Ş. Vasile, G. Vasilievici, O. Oprea, G. Dolete, B. Purcăreanu, D.E. Mihaiescu, *Microwave-Assisted Sol–Gel Preparation of the Nanostructured Magnetic System for Solid-Phase Synthesis*. Nanomaterials, 2021, 11

- (12):3176. DOI: 10.3390/nano11123176, WOS:000736764000001 (premiat PRECISI-2023), **IF2023=4.4 Q1**, eISSN:2079-4991
- Ris10.** A. R. Leontieș, A. Răducan, D. C. Culiță, E. Alexandrescu, **A. Moroșan**, D. E. Mihaiescu, L. Aricov, *Laccase immobilized on chitosan-polyacrylic acid microspheres as highly efficient biocatalyst for naphthol green B and indigo carmine degradation*, *Chemical Engineering Journal*, 2022, 439 (6):135654. DOI: 10.1016/j.cej.2022.135654 (premiat PRECISI-2023), WOS:000820617300004, **IF2023=13.3 Q1**, ISSN: 1385-8947
- Ris11.** A.-M. Croitoru, **A. Moroșan**, B. Tihăuan, O. Oprea, L. Motelica, R. Trusca, A. Nicoara, R. C. Popescu, D. Savu, D. E. Mihaiescu, A. Fikai, *Novel GO/Qu and GO/Ju Nanostructured Platforms as Effective Drug Delivery Systems with Biomedical Applications*, *Nanomaterials*, 2022, 12, 1943 (premiat PRECISI-2023). <https://doi.org/10.3390/nano12111943>, WOS:000810221700001, **IF2023=4.4 Q2**, eISSN: 2079-4991
- Ris12.** E. A. Luță, A. Biță, **A. Moroșan***, D. E. Mihaiescu, M. Ghica, D. P. Mihai, O. T. Olaru, T. Deculescu-Ioniță, L. E. Duțu, M. L. Popescu, L. Costea, G. M. Nitulescu, D. Lupuliasa, R. Boscencu, C. E. Gîrd, *The Influence of Phytosociological Cultivation and Fertilization on Polyphenolic Content of Menthae and Melissa folium and Evaluation of Antioxidant Properties through In Vitro and In Silico Methods*, *Plants*, 2022, 11, 2398. <https://doi.org/10.3390/plants11182398>, WOS:000857091600001, **IF2023=4 Q1**, eISSN: 2223-7747
- Ris13.** D. E. Mihaiescu, D. Istrati, **A. Moroșan***, M. Stanca, B. Purcăreanu, R. Cristescu, B. Ș. Vasile, R. D. Trușca, *Low Release Study of Cefotaxime by Functionalized Mesoporous Silica Nanomaterials*. *Gels*, 2022, 8, 711. <https://doi.org/10.3390/gels8110711> (premiat PRECISI-2023), WOS: 000895261200001, **IF2023=5 Q1**, eISSN: 2310-2861
- Ris14.** L. Aricov, A. Raducanu, I. C. Gifu, E. Alexandrescu, A. Precupas, A. V. F. Neculae, R. M. Visan, **A. Moroșan**, A. R. Leontieș, *The immobilization of laccase on mixed polymeric microspheres for methyl red decomposition*. *Coatings*, 2022; 12, 1965. <https://doi.org/10.3390/coatings12121965> (premiat PRECISI-2023), WOS: 000902271300001, **IF2023=2.9 Q2**, eISSN: 2079-6412
- Ris15.** G. Dolete, C.-I. Ilie, C. Chircov, B. Purcăreanu, L. Motelica, **A. Moroșan**, O. C. Oprea, D. Fikai, E. Andronescu, L.-M. Dițu. *Synergistic Antimicrobial Activity of Magnetite and Vancomycin-Loaded Mesoporous Silica Embedded in Alginate Films*. *Gels*, 2023; 9 (4): 295. <https://doi.org/10.3390/gels9040295>, WOS: 000977478100001, **IF2023=5 Q1**, eISSN: 2310-2861
- Ris16.** A. R. Ungureanu[†], C. L. Chițescu, E. A. Luță, **A. Moroșan[†]**, D. E. Mihaiescu, D. P. Mihai, L. Costea, E. A. Ozon, A. C. Fița, T. D. Balaci, R. Boscencu, C. E. Gîrd.

- Outlook on Chronic Venous Disease Treatment: Phytochemical Screening, In Vitro Antioxidant Activity and In Silico Studies for Three Vegetal Extracts*. *Molecules*, 2023; 28 (9): 3668. <https://doi.org/10.3390/molecules28093668>, WOS: 000987569500001, **IF2023= 4.2 Q2**, eISSN: 1420-3049
- Ris17.** R. Roman, L. Pintilie, M. T. Căproiu, F. Dumitrașcu, D. C. Nuță, I. Zarafu, P. Ioniță, M. C. Chifiriuc, C. Chiriță, **A. Moroșan**, M. Popa, C. Bleotu, C. Limban. *New N-acyl Thiourea Derivatives: Synthesis, Standardized Quantification Method and In Vitro Evaluation of Potential Biological Activities*. *Antibiotics*. 2023; 12 (5): 807. <https://doi.org/10.3390/antibiotics12050807>, WOS: 000994648500001, **IF2023=4.3 Q1**, eISSN: 2079-6382
- Ris18.** A. Ghica, V. Drumea, **A. Moroșan***, D. E. Mihaiescu, L. Costea, E. A. Luță, D. P. Mihai, D. T. Balaci, A. C. Fița, O. T. Olaru, R. Boscencu, C. E. Gîrd, *Phytochemical screening and antioxidant potential of selected extracts from Betula alba var. pendula Roth., Glycyrrhiza glabra L and Avena sativa L.*, *Plants*. 2023; 12 (13), 2510; <https://doi.org/10.3390/plants12132510>, WOS: 001032995100001, **IF2023=4 Q1**, eISSN: 2223-7747
- Ris19.** E. A. Luță, A. Biță, **A. Moroșan**, D. E. Mihaiescu, D. P. Mihai, L. Popescu, L. E. Bejenaru, C. Bejenaru, V. Popovici, O. T. Olaru, C. E. Gîrd, *The Positive Impact on the Antioxidant Activity of Common Cultivation of Two Lamiaceae Medicinal Plants—Rosemary and Thyme. Higher Concentrations of Natural Compounds Obtained with Potential Use for New Drug Development*, *International Journal of Molecular Sciences (IJMS)*. 2023; 24 (14), 11670; <https://doi.org/10.3390/ijms241411670>, WOS:001038534700001, **IF2023=4.9 Q1**, eISSN: 1661-6596
- Ris20.** B. Purcareanu, M. D. Ene, **A. Morosan**, D. E. Mihaiescu, M. A. Florea, A. Ghica, R. A. Nita, V. Drumea, M. A. Grigorescu, A. Kuncser, P. Badica, L. Olariu. *Mesoporous Composite Bioactive Compound Delivery System for Wound-Healing Processes*. *Pharmaceutics* 2023, 15, 2258. <https://doi.org/10.3390/pharmaceutics15092258>, WOS:001072921500001, **IF2023=4.9 Q1**, eISSN: 1999-4923
- Ris21.** A.-G. Niculescu, A. C. Bîrcă, **A. Moroșan**, O. Gherasim, O. C. Oprea, B. Ș. Vasile, B. Purcăreanu, D. E. Mihaiescu, M. Rădulescu, A. M. Grumezescu, *Microwave-Assisted Silanization of Magnetite Nanoparticles Pre-Synthesized by a 3D Microfluidic Platform*. *Nanomaterials* 2023, 13(20), 2795; <https://doi.org/10.3390/nano13202795>, WOS:001095122300001, **IF2023=4.4 Q2**, eISSN: 2079-4991
- Ris22.** M. Tociu, F. A. Manolache, B. Bălănuță, A. Moroșan, R. Stan, *Superior valorisation of Juglans regia L. leaves of different maturity through the isolation of bioactive*

compounds. *Molecules* 2023, 28, 7328; <https://doi.org/10.3390/molecules28217328>, WOS: 001103298700001 , **IF2023= 4.2 Q2**, eISSN: 1420-3049

- Ris23.** C.E. Răducanu, T. Dobre, D.E. Mihaiescu, A. Moroșan, R. Jidveian, D.R. Cioroiu Tîrpan, A.D. Vasiliu, C.I. Gogoasă, O.C. Pârvulescu, B. Trică, Synthesis of Guanidine and Its Deposition on Bacterial Cellulose as Green Heterogeneous Catalyst for Transesterification to Methyl Esters. *Energies*, 2024, 17, 6, 1344. <https://doi.org/10.3390/en17061344>, WOS:001191549500001, **IF2023=3 Q3**, eISSN:1996-1073
- Ris24.** A.-G. Niculescu, O.M. Munteanu, A.C. Bîrcă, A. Moroșan, B. Purcăreanu, B.Ș. Vasile, D. Istrati, D.E. Mihaiescu, T. Hadibarata, A.M. Grumezescu, New 3D Vortex Microfluidic System Tested for Magnetic Core-Shell Fe₃O₄-SA Nanoparticle Synthesis. *Nanomaterials*, 2024, 14, 902. <https://doi.org/10.3390/nano14110902>, WOS:001247009400001, **IF2023=4.4 Q2**, eISSN:2079-4991
- Ris25.** A.-G. Niculescu, B. Mihaiescu, A.C. Bîrcă, A. Moroșan, O.M. Munteanu, B.Ș. Vasile, T. Hadibarata, D. Istrati, D.E. Mihaiescu, A.M. Grumezescu, Fabrication and Advanced Imaging Characterization of Magnetic Aerogel-Based Thin Films for Water Decontamination. *Gels*, 2024, 10, 394. <https://doi.org/10.3390/gels10060394>, WOS:001255959400001, **IF2023=5 Q1**, eISSN:2310-2861
- Ris26.** D-A. Mercan, A-G. Niculescu, A.C. Bîrcă, D-E. Cristea, A. Moroșan, D-I. Tudorache, B. Purcăreanu, B.Ș. Vasile, D. Radu, M.A. Grigoroscuta, T. Hadibarata, D.E. Mihaiescu, A.M. Grumezescu, Vortex-Mixing Microfluidic Fabrication of Micafungin-Loaded Magnetite–Salicylic Acid–Silica Nanocomposite with Sustained-Release Capacity. *Materials*. 2024; 17(23):5816. <https://doi.org/10.3390/ma17235816>, WOS:001376521300001, **IF2023=3.1 Q2**, eISSN:1996-1944
- Ris27.** N. Badea, D. Samayoa, A. Moroșan, C. Ott, I. Lacatusu, Hybrid Carbohydrate–Lipid Nanocarriers: In Vitro Efficacy Gene-Rated by Association of UV-Absorbers and Raspberry Polyphenols Rich-Fraction. *Pharmaceuticals* 2025, 18 (1), 16. <https://doi.org/10.3390/ph18010016>, WOS:001405758600001, **IF2023=4.3 Q1**, eISSN:1424-8247

III.2. Rio – Alte articole publicate în reviste de specialitate de circulație internațională

- Rio1.** C. Ravariu, C. Parvulescu, E. Manea, D. Mihaiescu, **A. Morosan**, *Development of Integrated Biosensors and NanoElectronic Devices in the next CMOS Stage*,

International Journal of Pharmaceutical Research, 2019, 11(3), 1310-1315, ISSN: 0975-2366

III.3. Vis – Articole publicate în volume ale unor manifestări științifice internaționale recunoscute, organizate în țară și străinătate, indexate ISI Thomson Reuters, fără factor de impact calculat

Vis1. C. Ravariu, D. E. Mihaiescu, D. Istrati, **A. Morosan**, Experimental Characteristics of Organic Transistor with Silver Gate, Proceedings of the International Semiconductor Conference (CAS), 2019, 31-34, DOI: 10.1109/SMICND.2019.8923962, WOS:000514295300005, ISSN:1545-827X

III.4. Vi – Articole publicate în volume ale unor manifestări științifice internaționale recunoscute, organizate în țară și străinătate;

Vi1. C. Ravariu, D.E. Mihaiescu, **A. Morosan**, D. Istrati, F. Babarada, Simulation and Experimental Studies about Proper Electrodes of an Organic Thin Film Transistor, 11th International Symposium on Advanced Topics in Electrical Engineering (ATEE), 2019, 1-4. DOI: 10.1109/ATEE.2019.8725006