

Universitatea Națională de Știință și Tehnologie POLITEHNICA București

Facultatea: **Inginerie Chimica si Biotehnologii**

Departamentul: **Chimie Anorganica, Chimie Fizica si Electrochimie**

Nume Prenume: **Dumitru Florina**

Gradul didactic: **Profesor**

L I S T A

lucrărilor științifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat:

T1. SISTEME DINAMICE PE BAZA DE LIGANZI POLIDENTATI. AMPLIFICARE CONSTITUTIONALA IN BIBLIOTECI COMBINATORIALE DINAMICE DE BIS(IMINO)PIRIDINE - **Universitatea Politehnica din Bucuresti/ SYSTEMES DYNAMIQUES A BASE DE LIGANDS POLYDENTES. AMPLIFICATION CONSTITUTIONNELLE DANS UNE BIBLIOTHEQUE COMBINATOIRE DYNAMIQUE DE BIS(IMINO)PYRIDINES - Université de Montpellier II Sciences et Techniques du Languedoc (Montpellier, France)- sustinuta in 2007, Ordin MEc nr. 3439/12.03.2008.**

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

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

1. Simonescu, C.-M.; **Dumitru, F.**; Zărnescu, B.; Culiță, D.C.; Răzvan, A.; Oprea, O.; Trușcă, R.; Vasile, E. *Competitive Adsorption of Aqueous Cd(II) and Pb(II) Solutions onto Silicas Synthesized with Saponin as Template Agent*. J. Compos. Sci. 2024, 8, 227. <https://doi.org/10.3390/jcs8060227>
2. Anca Razvan, Geani Teodor Man, **Florina Dumitru**, Madalina Pandele, Roxana Trusca, Ludmila Motelica, Ovidiu Oprea, Gheorghe Nechifor, *Nanocomposite membranes prepared from cellulose acetate or polysulfone with Ag0 nanoparticles and nitron reagent for nitrate ion removal*, Desalination and Water Treatment 318 (2024) 100400, <https://doi.org/10.1016/j.dwt.2024.100400>
3. Păncescu FM, Rikabi AAKK, Oprea OC, Grosu AR, Nechifor AC, Grosu V-A, Tanczos S-K, **Dumitru F**, Nechifor G, Bungău SG. Chitosan–sEPDM and Melatonin–Chitosan–sEPDM Composite Membranes for Melatonin Transport and Release. *Membranes*. **2023**; 13(3):282. <https://doi.org/10.3390/membranes13030282>, WOS:000959183600001
4. Pașcu D, Nechifor AC, Grosu V-A, Oprea OC, Tanczos S-K, Man GT, **Dumitru F**, Grosu AR, Nechifor G. Hydrogen Sulphide Sequestration with Metallic Ions in Acidic Media Based on Chitosan/sEPDM/Polypropylene Composites Hollow Fiber Membranes System. *Membranes*. **2023**; 13(3):350. <https://doi.org/10.3390/membranes13030350>, WOS:000959060500001
5. A. M. Cimbru, A. A. K. K. Rikabi, O. Oprea, A. R. Grosu, S.-K. Tanczos, M. C. Simonescu, D. Pașcu, V.-A. Grosu, **F. Dumitru**, G. Nechifor, pH and pCl Operational Parameters in Some Metallic Ions

Separation with Composite Chitosan/Sulfonated Polyether Ether Ketone/Polypropylene Hollow Fibers Membranes, *Membranes* **2022**, 12(9), 833; <https://doi.org/10.3390/membranes12090833>
WOS:000857021200001

6. T. Diop, M.B. Diop, C.A. K. Diop, A. Diasse-Sarr, M. Sidibe, **F. Dumitru**, A. van der Lee, *Synthesis and structural characterization of new ladder-like organostannoxanes derived from carboxylic acid derivatives: $[C_5H_4N(p-CO_2)]_2[Bu_2Sn]_4(\mu_3-O)_2(\mu_2-OH)_2$, $[Ph_2CHCO_2]_4[Bu_2Sn]_4(\mu_3-O)_2$, and $[(p-NH_2)-C_6H_4-CO_2]_2[Bu_2Sn]_4(\mu_3-O)_2(\mu_2-OH)_2$* , *Main Group Metal Chemistry*, vol. 45, no. 1, **2022**, pp. 35-43. <https://doi.org/10.1515/mgmc-2022-0008>, WOS:000792848700001
7. A.C. Nechifor, A. Pîrțac, P. C. Albu, A. R. Grosu, **F. Dumitru**, I. A. Dimulescu, O. Oprea, D. Pașcu, G. Nechifor, S. G. Bungău, *Recuperative Amino Acids Separation through Cellulose Derivative Membranes with Microporous Polypropylene Fiber Matrix*. *Membranes* **2021**, 11, 429. <https://doi.org/10.3390/membranes11060429>, WOS:000666127900001
8. T. Diop, A. Ndioléne, M.B. Diop, M. S. Boye, A. van der Lee, **F. Dumitru**, C.A.K. Diop, M. Sidibé, *Synthesis, spectral (FT-IR, 1H , ^{13}C) studies, and crystal structure of $[(2,6-CO_2)2C_5H_3NSnBu_2(H_2O)]_2 \cdot CHCl_3$* *Zeitschrift für Naturforschung B*, vol. 76, no. 2, **2021**, pp. 127-132. <https://doi.org/10.1515/znb-2020-0195> WOS:000640187400006
9. L. Motelica, A. Popescu, A.-G. Răzvan, O. Oprea, R.-D. Trușcă, B.-S. Vasile, **F. Dumitru**, A.-M. Holban, *Facile Use of ZnO Nanopowders to Protect Old Manual Paper Documents*. *Materials* **2020**, 13, 5452, <https://www.mdpi.com/1996-1944/13/23/5452> , WOS:000597914700001.
10. **F. Dumitru**, A. van der Lee, M. Barboiu
Chiral superstructures from homochiral Zn^{2+} , Co^{2+} , Fe^{2+} -2,6-bis (arylethyl-imine)pyridine complexes. *Chirality*. 31(10), 763-775, **2019**, DOI: [10.1002/chir.23115](https://doi.org/10.1002/chir.23115), WOS:000489266000001
11. A. Razvan, D. F. Popa, O. Oprea, E. Vasile, **F. Dumitru**, G. Nechifor
Ultrafiltration mixed matrix membranes based on mesoporous silica (MCM-41, HMS) embedded in polysulfone, *REV.CHIM.(Bucharest)*, 70(9), **2019**, 3089-3093. WOS:000489958900001
12. E. E. Totu, C.M. Cristache, R. Buga, **F. Dumitru**, T. Totu
A card double face: Compounds' functionality and synergy of a topical treatment proposed for oral health improvement in periodontal disease, *Revista de Chimie*, Volume 70, Issue 5, **2019**, Pages 1551-1557 WOS:000470086400008
13. D. F. Enache, E. Vasile, C. M. Simonescu, D. Culita, E. Vasile, O. Oprea, A. M. Pandele, A.-G. Razvan, **F. Dumitru**, G. Nechifor
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part of the themed collection: [Editors' collection: Environmental chemistry: Pollution control](#)

14. D. F. Enache, G. A. Popa, E. Vasile, A. Razvan, O. Oprea, E. Voicila, **F. Dumitru**, *Preparation and Characterization of Ultrafiltration TiO₂ Nanoparticles-Polysulfone Membranes*, REV.CHIM. (Bucharest), 68(11), **2017**, 2635-2640. WOS:000416751800035
15. D. F. Enache, E. Vasile, C. M. Simonescu, A. Razvan, A. Nicolescu, A-C. Nechifor, O. Oprea, R.-E. Patescu, C. Onose, **F. Dumitru**, *Cysteine-functionalized silica-coated magnetite nanoparticles as potential nanoadsorbents*, J. Solid State Chem. 253C, **2017**, 318-328, [10.1016/j.jssc.2017.06.013](https://doi.org/10.1016/j.jssc.2017.06.013), WOS:000406572600044
16. S. Schneider, E.-D. Licsandru, I. Kocsis, A. Gilles, **F. Dumitru**, E. Moulin, J. Tan, J.-M. Lehn, N. Giuseppone, M. Barboiu, *Columnar Self-Assemblies of Triarylaminines as Scaffolds for Artificial Biomimetic Channels for Ion and for Water Transport*, J. Am. Chem. Soc., **2017**, 139(10), 3721–3727, [10.1021/jacs.6b12094](https://doi.org/10.1021/jacs.6b12094), ISSN: 0002-7863;1520-5126, WOS:000396801300025
17. M. D. Serb, E. Vasile, A. Razvan, **F. Dumitru**, C. Andronescu, O. Oprea, O. R. Vasile, A. M. Holban, E. Andronescu, *Fe₃O₄ nanoparticles coated with Zn(II)-carboxylato complexes*, Dig. J. Nanomater. Bios. 11(2), **2016**, 495-505. ISSN: 1842-3582, WOS:000378158700020
18. **F. Dumitru**, U. Englert, B. Braun, *Orientational disorder in the one-dimensional coordination polymer catena-poly[[bis(acetyl-acetonato-kappa O-2, O ') cobalt(II)]-mu-1,4-diaza-bicyclo[2.2.2] octane-kappa(2) N-1 : N-4]*, Acta Cryst. E72, **2016**, 548-551, <http://dx.doi.org/10.1107/S205698901600428X>. ISSN: 2056-9890 WOS:000374651100031
19. M.-G. Alexandru, **F. Dumitru** *Crystal structure of tris(mu-bis{4-[(pyridin-2-ylmethylidene) amino]phenyl}methane-k⁴N,N':N'', N''')dizinc tetrakis(tetrafluoridoborate)acetonitrile trisolvate*, Acta Cryst. E71(12), **2015**, m271, <https://doi.org/10.1107/S205698901502455X>, ISSN: 2056-9890, WOS:000370762300034
20. M.-D. Şerb, P. Müller, R. Truşcă, O. Oprea, **F. Dumitru** *Study of thermal decomposition of a zinc(II) monomethyl terephthalate complex, [Zn(CH₃O-CO-C₆H₄COO)₂(OH₂)₃·2H₂O*, J. Therm. Anal. Calorim., 121(2), 691-695, **2015**, [doi:10.1007/s10973-015-4629-6](https://doi.org/10.1007/s10973-015-4629-6) ISSN: 1388-6150; eISSN: 1572-8943, WOS:000357676500019
21. L. Pop, **F. Dumitru**, N. Hadade, Y.-M. Legrand, A. van der Lee, M. Barboiu, I. Grosu *Exclusive Hydrophobic Self-Assembly of Adaptive Solid-State Networks of Octasubstituted 9,9'-Spirobifluorenes*, Org. Lett., 17(14), 3494-3497, **2015**, [doi: 10.1021/acs.orglett.5b01576](https://doi.org/10.1021/acs.orglett.5b01576). ISSN: 1523-7060; eISSN: 1523-7052 WOS:000358395500030
22. M. Barboiu, **F. Dumitru**, E. Petit, Y.-M. Legrand, A. van der Lee

Mesomeric metallosupramolecular grid architectures, Supramol. Chem. 27(5-6), 393-400, **2015**, [doi: 10.1080/10610278.2014.965708](https://doi.org/10.1080/10610278.2014.965708)

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23. D. Dumitrescu, **F. Dumitru**, Y.-M Legrand, E. Petit, A. van der Lee, M. Barboiu
New "Pyrene Box" Cages for Adaptive Guest Conformations, Org. Lett. 17(9), 2178-2181, **2015**, [doi: 10.1021/acs.orglett.5b00779](https://doi.org/10.1021/acs.orglett.5b00779)

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

- Reviste

1.

- Selecție cu maximum 20 lucrări în volume de conferințe

1.

E. Brevete obținute în întreaga activitate

1. T. Negreanu-Pirjol, B. S. Negreanu-Pirjol, C. Guran, M. Calinescu, A. Oancea, E. Gorun, **F. Dumitru**, A. Meghea, N. Badea, M. M. Bratu, L. A. Bucur, L. Moldovan, V. Coroiu, O. Calinescu, M. R. Stoicescu, F. B. Nitu, *Metal Chlorhexidine Complexes And Process For Preparing The Same*, RO127465 (A8), 30.07.**2012**.
http://worldwide.espacenet.com/publicationDetails/biblio?FT=D&date=20120629&DB=EP&DOC&locale=en_EP&CC=RO&NR=127465A2&KC=A2&ND=4
2. T. Negreanu-Pirjol, B.S. Negreanu-Pirjol, C. Guran, M. Calinescu, A. Oancea, E. Gorun, F.N. Roncea, **F. Dumitru**, A. Meghea, N. Badea, G. Taralunga, R. Sirbu, L. Moldovan, M. Mirea, *Pharmaceutical Cream-type Preparations Based on Metal Complexes of Chlorhexidine and Process for Preparing the Same*, RO127721 (A2), 30.08.**2012**.
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3. T. Negreanu-Pirjol, B. S. Negreanu-Pirjol, C. Guran, M. Calinescu, A. Oancea, E. Gorun, F. N. Roncea, **F. Dumitru**, A. Meghea, N. Badea, G. Taralunga, L. Moldovan, *Pharmaceutical Bioadhesive Disk-type Preparations Based on Chlorhexidine Metal Complexes and Process for Preparing the Same*, RO127727 (A2), 30.08. **2012**.
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4. T. Negreanu-Pirjol, B. S. Negreanu-Pirjol, C. Guran, M. Calinescu, A. Oancea, E. Gorun, F. N. Roncea, **F. Dumitru**, A. Meghea, N. Badea, G. Taralunga, C. Amariei, L. Moldovan, *Pharmaceutical Mouthwash-type Preparations based on Chlorhexidine Metal Complexes and Process for Preparing the Same*, RO127722 (A2), 30.08.**2012**, (RO127722 (A8) **2012**-11-29).
http://worldwide.espacenet.com/publicationDetails/biblio?FT=D&date=20120830&DB=EP&ODOC&locale=en_EP&CC=RO&NR=127722A2&KC=A2&ND=4
5. T. Negreanu-Pirjol, B. S. Negreanu-Pirjol, C. Guran, M. Calinescu, A. Oancea, E. Gorun, F. N. Roncea, **F. Dumitru**, A. Meghea, N. Badea, G. Taralunga, R. Sirbu, L. Moldovan, *Pharmaceutical Bioadhesive Gel-type Preparations Based on Chlorhexidine Metal Complexes and Process for Preparing the Same*, RO127726 (A2), 30.08.**2012**.

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