**Dr. Chim. Maranescu Bianca Elena**

# LISTA LUCRĂRILOR PUBLICATE

## A. 10 LUCRĂRI REPREZENTATIVE

**1.** Maranescu B.* Visa A., Applications of Metal-Organic Frameworks as Drug Delivery Systems, International Journal of Molecular Sciences, 2022, 23(8), 4458, DOI10.3390/ijms23084458, WOS:000786255600001, (Q1)

**2.** García M., Vílchez. A, Maranescu B., Pastor P; Marganovici M., Ilia G., Cabeza Díaz A., Visa A., Pérez Colodrero R., Synthesis and Electrochemical properties of metal (II)-carboxyethylphenylphosphinates, Dalton Transactions, 2021, 50(19), 6539-6548, DOI10.1039/d1dt00104c, WOS:000642584600001, (Q1)

**3.** Visa A., Ilia G., Lupa L., Maranescu B.* Use of highly stable phosphonate coordination polymers as adsorbents for wastewater, Applied Organometallic Chemistry, 2021, 35(5), e6184, DOI10.1002/aoc.6184, WOS:000615201500001, (Q1)

**4.** Popa A., Visa A., Maranescu B.*, Hulka I., Lupa L., Chemical modification of chitosan for removal of Pb (II) ions from aqueous solutions, Materials, 2021, 14(24),7894, DOI10.3390/ma14247894, WOS:000738664600001, (Q2)

**5.** Maranescu B., Lupa L., Visa A., Synthesis, characterization and rare earth elements adsorption properties of phosphonate metal organic frameworks, Applied Surface Science, 2019, 481, 83-91, DOI10.1016/j.apsusc.2019.03.067, WOS:000472176900011, (Q1)

**6.** Maranescu B., Plesu N., Visa A., Phosphonic acid vs phosphonate metal organic framework influence on mild steel corrosion protection, Applied Surface Science, 2019, 497, 143734, DOI10.1016/j.apsusc.2019.143734, WOS:000487849800078, (Q1)

**7.** Maranescu B., Lupa L., Visa A., Synthesis, characterizations and Pb (II) sorption properties of cobalt phosphonate materials, Pure and Applied Chemistry, 2016, 88(10-11), 979-992, DOI10.1515/pac-2016-0709, WOS:000393350200008, (Q3)

**8.** Maranescu B., Visa A., Ilia G., Simon Z., Demadis K.D, Colodrero R.M..P, Cabeza A., Vallcorba O., Rius J., Choquesillo-Lazarte D., Synthesis and structural characterization of 2-D layered copper (II) styrylphosphonate coordination polymers, Journal of Coordination Chemistry, 2014, 67(9), 1562-1572, DOI10.1080/00958972.2014.928289, WOS:000340149000006

**9.** Visa A., Mracec. M., Maranescu B., * Maranescu V., Ilia G., Popa A., Mracec M., Structure simulation into a lamellar supramolecular network and calculation of the metal ions/ligands ratio, Chemistry Central Journal, 2012, 6, 91, DOI10.1186/1752-153X-6-91, WOS:000308747600001, (Q2)

**10.** Colodrero R.M.P., Cabeza A., Olivera-Pastor P., Choquesillo D., Turner A., Ilia G., Maranescu B., Papathanasiou K.E, Hix G.B, Demadis K.D., Aranda M.A.G., Divalent metal vinylphosphonate layered materials: compositional variability, structural peculiarities, dehydration behavior, and photoluminescent properties, Inorganic Chemistry, 2011, 50(21), 11202-11211, DOI10.1021/ic201760w, WOS:000296303900089, (Q1)

## B. Teză de doctorat

*Studii teoretice şi experimentale privind hibrizi organici/anorganici conţinând compuşi element – organici*

*Conducător Științific*: Prof. Dr. Zeno Simon, M. C. al Academiei Române

*Academia Română*, Susținută public în 21.10.2011

Titlul de Doctor confirmat prin OMEdC 4698 / 26.04.2012

## C. LUCRĂRI ŞTIINŢIFICE PUBLICATE ÎN JURNALE INDEXATE ÎN WEB OF SCIENCE publicate în perioada 2005- 2024

**1.** Lupa L., Tolea N.S, Iosivoni M., Maranescu B., Plesu N., Visa A., Performance of ionic liquid functionalized metal organic frameworks in the adsorption process of phenol derivatives, RSC Advances, 2024, 14, 4759-4777, DOI10.1039/d3ra08024b, WOS:001157822200001, (Q2)

**2.** Plesu N., Macarie L., Mihali M., Maranescu B., Visa A., Jurcau D., Polyester-Based Coatings with a Metal Organic Framework: An Experimental Study for Corrosion Protection, Journal of Composites Science, 2023, 7 (10), 422. DOI10.3390/jcs7100422, WOS:001093651100001, (Q2)

**3.** Plesu N., Maranescu B., Mihali M., Visa A., Electrochemical Oxidation of Phenol Released from Spent Coordination Polymer Impregnated with Ionic Liquid, Journal of Composites Science, 2023, 7(12), 510, DOI10.3390/jcs7120510, WOS:001131395400001, (Q2)

**4.** Maranescu B., Visa A., Applications of Metal-Organic Frameworks as Drug Delivery Systems, International Journal of Molecular Sciences, 2022, 23(8), 4458, DOI10.3390/ijms23084458, WOS:000786255600001, (Q1)

**5.** Marganovici M., Maranescu B., Visa A., Lupa L., Hulka I., Chiriac V., Ilia G., Hybrid Coordination Networks for Removal of Pollutants from Wastewater, International Journal of Molecular Sciences, 2022, 23 (20), 12611. DOI10.3390/ijms232012611, WOS:000873052800001, (Q1)

**6.** Nichita I., Visa A., Maranescu B., Lupa L., Popa A., Synthesis and Characterization of Modified Chitosan with Aminophosphonic Groups and Zn (II) Ions and Assessment as Potential Antibacterial Adsorbent, Materiale Plastice, 2022, 59 (4), 125-134, DOI10.37358/MP.22.4.5631, WOS:000965030700011

**7.** García M., Vílchez. A, Maranescu B., Pastor P; Marganovici M., Ilia G., Cabeza Díaz A., Visa A., Pérez Colodrero R., Synthesis and Electrochemical properties of metal (II)-carboxyethylphenylphosphinates, Dalton Transactions, 2021, 50(19), 6539-6548, DOI10.1039/d1dt00104c, WOS:000642584600001, (Q1)

**8.** Visa A., Ilia G., Lupa L., Maranescu B, Use of highly stable phosphonate coordination polymers as adsorbents for wastewater, Applied Organometallic Chemistry, 2021, 35(5), e6184, DOI10.1002/aoc.6184, WOS:000615201500001, (Q1)

**9.** Popa A., Visa A., Maranescu B., Hulka I., Lupa L., Chemical modification of chitosan for removal of Pb (II) ions from aqueous solutions, Materials, 2021, 14(24),7894, DOI10.3390/ma14247894, WOS:000738664600001, (Q2)

**10.** Visa A., Maranescu B., Lupa L., Crisan L., Borota A., New Efficient Adsorbent Materials for the Removal of Cd (II) from Aqueous Solutions, Nanomaterials, 2020, 10(5), 899, DOI10.3390/nano10050899, WOS:000540781800082, (Q1)

**11.** Visa A., Plesu N., Maranescu B., Ilia G., Borota A., Crisan L., A combined experimental and theoretical insights into the corrosion inhibition activity on carbon steel iron of phosphonic acids, Molecules, 2020, 26(1), 135, DOI10.3390/molecules26010135, WOS:000606214600001, (Q2)

**12.** Nistor M.A., Muntean S.G., Maranescu B., Visa A, Phosphonate metal-organic frameworks used as dye removal materials from wastewaters, Applied Organometallic Chemistry, 2020, 34(11), e5939, DOI10.1002/aoc.5939, WOS:000552629100001, (Q1)

**13.** Maranescu B., Lupa L., Visa A., Synthesis, characterization and rare earth elements adsorption properties of phosphonate metal organic frameworks, Applied Surface Science, 2019, 481, 83-91, DOI10.1016/j.apsusc.2019.03.067, WOS:000472176900011, (Q1)

**14.** Maranescu B., Plesu N., Visa A., Phosphonic acid vs phosphonate metal organic framework influence on mild steel corrosion protection, Applied Surface Science, 2019, 497, 143734, DOI10.1016/j.apsusc.2019.143734, WOS:000487849800078, (Q1)

**15.** Cocheci L., Lupa L., Pop A., Visa A., Maranescu B., Popa A., Photocatalytical Degradation of Congo Red Azo Dye Using Phosphono-Aminoacid-Cd (II) Pendant Groups Grafted on a Polymeric Support, Revista de Chimie, 2019, 70(10), 3473-3476, WOS:000500795900005
**16.** Lupa L., Maranescu B., Visa A., Equilibrium and kinetic studies of chromium ions adsorption on Co (II)-based phosphonate metal organic frameworks, Separation Science and Technology, 2018, 53(7), 1017-1026, DOI10.1080/01496395.2017.1340953, WOS:000424302500002
**17.** Maranescu B., Popa A., Lupa L., Maranescu V., Visa A., Use of chitosan complex with aminophosphonic groups and cobalt for the removal of $Sr^{2+}$ ions, Separation Science and Technology, 2018, 53(7), 1058-1064, DOI10.1080/01496395.2017.1304961, WOS:000424302500006
**18.** Maranescu B., Lupa L., Mihali M.T.L., Plesu N., Maranescu V., Visa A., The corrosion inhibitor behavior of iron in saline solution by the action of magnesium carboxyphosphonate, Pure and Applied Chemistry, 2018, 90(11), 1713-1722, DOI10.1515/pac-2018-0513, WOS:000450639300006
**19.** Maranescu B., Lupa L., Visa A., Heavy metal removal from waste waters by phosphonate metal organic frameworks, Pure and Applied Chemistry, 2018, 90(1), 35-47, DOI10.1515/pac-2017-0307, WOS:000426360200004
**20.** Ilia G., Iliescu S., Popa A., Visa A., Maranescu B., Simulescu V., Pekar M., Badea V., Poly(alkylene-H-phosphonate)s obtained by direct esterification and oxidation of hypophosphorous acid with ethylene glycol, Journal of Macromolecular Science Part A-Pure and Applied Chemistry, 2016, 53(1), 49-54, DOI10.1080/10601325.2016.1110458, WOS:000367550100008
**21.** Maranescu B., Lupa L., Visa A., Synthesis, characterizations and Pb (II) sorption properties of cobalt phosphonate materials, Pure and Applied Chemistry, 2016, 88(10-11), 979-992, DOI10.1515/pac-2016-0709, WOS:000393350200008
**22.** Maranescu B., Visa A., Maranescu V., Co-Vinyl Phosphonate Electrical Properties, Phosphorus, Sulfur and Silicon and the Related Elements, 2015, 190(5-6), 902-904, DOI10.1080/10426507.2014.993761, WOS:000357323000054
**23.** Visa A., Maranescu B., Bucur A., Spectroscopic Properties of New Cerium Metal-Organic Framework Based on Phosphonate Ligands with Vinyl Functional Group, Phosphorus, Sulfur and Silicon and the Related Elements, 2015, 190(5-6), 959-960, DOI10.1080/10426507.2014.995298, WOS:000357323000070
**24.** Maranescu B., Visa A., Ilia G., Simon Z., Demadis K.D, Colodrero R.M..P, Cabeza A., Vallcorba O., Rius J., Choquesillo-Lazarte D., Synthesis and structural characterization of 2-D layered copper (II) styrylphosphonate coordination polymers, Journal of Coordination Chemistry, 2014, 67(9), 1562-1572, DOI10.1080/00958972.2014.928289, WOS:000340149000006
**25.** Iliescu S., Plesu N., Macarie L., Popa A., Visa A., Maranescu B., Ilia G., Polymeric membranes containing phosphorus in the chain for solid polymer electrolytes, Phosphorus, Sulfur and Silicon and the Related Elements, 2014, 189(7-8), 992-1003, DOI10.1080/10426507.2014.905568, WOS:000341577500014
**26.** Maranescu B., Visa A., Ilia G., The influence of pH on the properties of cobalt styrylphosphonate, Phosphorus, Sulfur and Silicon and the Related Elements, 2014, 189(7-8), 1004-1012, DOI10.1080/10426507.2014.905569, WOS:000341577500015
**27.** Visa A., Maranescu B., Bucur A., Iliescu S., Demadis KD., Synthesis and characterization of a novel phosphonate metal organic framework starting from copper salts, Phosphorus, Sulfur and Silicon and the Related Elements, 2014, 189(5), 630-639,DOI10.1080/10426507.2013.843004,WOS:000337246400006
**28.** Visa A., Maranescu B., Mracec M., Electronic properties of $Cu^{2+}$ vinylphosphonate estimated by PM3 semiempirical method, Revue Roumaine de Chimie, 2014, 59(3-4), 185-191, WOS:000345109700003

**29.** Petric M., Crisan L., Crisan M., Micle A., Maranescu B., Ilia G., Synthesis and QSRR Study for a Series of Phosphoramidic Acid Derivatives, Heteroatom Chemistry, 2013, 24(2), 138-145, DOI10.1002/hc.21076, WOS:000316296800007

**30.** Visa A., Mracec. M., Maranescu B., Maranescu V., Ilia G., Popa A., Mracec M., Structure simulation into a lamellar supramolecular network and calculation of the metal ions/ligands ratio, Chemistry Central Journal, 2012, 6, 91, DOI10.1186/1752-153X-6-91, WOS:000308747600001, (Q2)

**31.** Colodrero R.M.P., Cabeza A., Olivera-Pastor P., Choquesillo D., Turner A., Ilia G., Maranescu B., Papathanasiou K.E, Hix G.B, Demadis K.D., Aranda M.A.G., Divalent metal vinylphosphonate layered materials: compositional variability, structural peculiarities, dehydration behavior, and photoluminescent properties, Inorganic Chemistry, 2011, 50(21), 11202-11211, DOI10.1021/ic201760w, WOS:000296303900089, (Q1)

**32.** Fagadar-Cosma E., Creanga I., Maranescu B., Palade A., Lorinnczi A., Fagadar- Cosma G., Popescu M., Dependence of optical response on pH of a water- soluble Zn (II) Metalloporphyrin, Digest Journal of Nanomaterials And Biostructures, 2011, 6(1), 75-804, WOS:000289716200010

**33.** Maranescu B., Visa A., Iliescu S., Popa A., Ilia G., Maranescu V., Simon Z., Mracec M., Structural properties of $Ni^{2+}$vinylphosphonate using PM3 semi-empirical analysis, Revue Roumaine de Chimie, 2011, 56(12), 1137-1141, WOS:000304225400007

**34.** Maranescu B., Visa A., Mracec M., Ilia G., Maranescu V., Simon Z., Mracec M., Lamellar $Co^{2+}$ vinylphosphonate metal organic framework. PM3 semi-empirical analysis of structural properties, Revue Roumaine de Chimie, 2011, 56(5), 473-482, WOS:000345109700003

**35.** Fagadar-Cosma E., Maranescu B., Enache C., Savii C., Fagadar-Cosma G., Alternatives for obtaining of 5,10,15,20-tetralds(4-hydroxyphenyl)-21H,23H-porphin physico-chemical characterisation, Revista de Chimie, 2006, 57(11), 1144-1147, WOS:000244133900016

**36.** Maranescu B., Ilia G., Cozmiuc C., Glevitzky M., Synthesis and mathematic models of the HPLC behavior of phosphoramidic derivatives, Revista de Chimie, 2006, 57(10), 1470-1474, WOS:000242700500015

**37.** Moldovan R., Muntean S., Simu G., Maranescu B., Pascariu A., Methods for the characterization of arylazophosphonates, Revista de Chimie, 2006, 57(3), 281-284, WOS:000237578100012

**38.** Popa A., Ilia G., Davidescu C.M., Iliescu S., Macarie L., Maranescu B., Wittig reaction of quaternary phosphonium salts containing macromolecular ligands functionalized with aldehyde groups, Materiale Plastice, 2006, 43(1), 62-64, WOS:000236960700014

**39.** Cozmiuc C., Rojancovschi V., Maranescu B., Ilia G., Compounds of hexachlorociclotriphosphazene used as biosimulators, Revista de Chimie., 2005, 56(5), 564-565, WOS:000231256800028

**40.** Fagadar-Cosma E., Maranescu B., Fagadar-Cosma G., Cozmiuc C., Iodotriphenylphosphonium triiodide: IR, $^{1}$H-NMR, $^{31}$P-NMR, UV-VIS spectroscopy and HPLC investigations, Revista de Chimie, 2005, 56 (9), 947-950, WOS:000233286500012

**41.** Fulias A., Fagadar-Cosma E., Vlascici D., Maranescu B., Cozmiuc C., Comparative study of the obtaining and HPLC, UV-VIS and IR characteristics of the monomer and dimer type complexes of meso-tetranhenylporphirine with Zr (IV), Revista de Chimie, 2005, 56(10), 1040-1043, WOS:000233793100014

**42.** Maranescu B., Szabadai Z., Cozmiuc C., Ilia G., The study of the photo transformation of dimethyl 1,4-dihydro-2,6-dimethyl-4(2-nitrophenyl)-3,5-pitydinecarboxilate (Nifedipin), Revista de Chimie, 2005, 56(6), 663-666, WOS:000231257000021

**43.** Popa A., Ilia G., Iliescu S., Pascariu A., Maranescu B., Wittig Horner reactions on styrene-divinylbenzene type supports during the catalysis by interphase transfer. 2 The utilization of functionalized phosphonates, Materiale Plastice, 2005, 42(3), 226-228, WOS:000233226800013

## D. LUCRĂRI ŞTIINŢIFICE ÎN EXTENSO PUBLICATE ÎN REVISTE DIN STRĂINATATE FĂRĂ FACTOR DE IMPACT

**1.** Szabadai Z.**,** Maranescu B., Dragos D., Investigations on the Photo-Transformation of Retinol Acetate, *The Open Chemical and Biomedical Methods Journal*, 2, 2009, 111-116

## E. LUCRĂRI ŞTIINŢIFICE ÎN EXTENSO PUBLICATE ÎN REVISTE DIN ŢARĂ FĂRĂ FACTOR DE IMPACT

**1.** Petric M., Crisan L., Micle A., Crisan M., Maranescu B., Ilia G., Preliminary MLR study of phosphoramidate derivatives based on Dragon descriptor, *Annals of West University of Timisoara, Series of Chemistry*, 20(3), , 2011, 13-18, (ISSN 1224-9513).

**2.** Palade A., Creanga I, Maranescu B., Fagadar-Cosma E., Preliminary studies regarding novel Zn-Metalloporfhyrin, *Annals of University of Timisoara, Series of Chemistry*, nr.19(2), 2010, 23-28, (ISSN 1224-9513).

**3.** Căpriţă A., Căpriţă R., Cozmiuc C., Maranescu B., Sărăndan H., Simultaneous determination of mycotoxins (ochratoxin a and deoxynivalenol) in biological samples, *Journal of Agroalimentary Processes and Technologies*, XIII(2), 2007, 353-358

**4.** Maranescu B., Glevitzk M., PetricM, Crisan L., Correlations between HPLC. Foctor and Molecular Descriptors for Phosphoramidic Acid Derivatives, *Annals of University of Timisoara,Series Chemistry* , nr.14(2), 2005, 205-212

## F. LUCRĂRI ŞTIINŢIFICE ÎN EXTENSO PUBLICATE ÎN VOLUMELE UNOR MANIFESTĂRI ŞTIINŢIFICE INTERNAŢIONALE

**1.** Visa A., Maranescu B., Bucur A., Alternative synthesis routes for phosphonates metal organic frameworks, *Proceedings of The Seventh Edition of the Symposium with International Participation New Trends and Strategies in the Chemistry of Advanced Materials with Relevance in Biological Systems, Technique and Enviromental Protection, Timisoara, Romania, 5-6 iunie*, 2014, 93-97

**2.** Maranescu B., Bucur A., Visa A., Hydrothermal synthesis of metal organic framework based on phosphonate ligand with phenyl vinyl functional group, *Proceedings of the Seventh Edition of the Symposium with International Participation New Trends and Strategies in the Chemistry of Advanced Materials with Relevance in Biological Systems, Technique and Enviromental Protection, Timisoara, Romania, 5-6 iunie*, 2014, 120-124

**3.** Maranescu B., Visa A., Ilia G., Precursor for phosphonate metal organic framework with fascinating structure, *Proceedings of the 18$^{th}$ Symposium on analytical and environmental problems, Szeged, Hungary, 24 Septembrie*, 2012, 227-230

**4.** Visa A., Maranescu B., Bucur A., Simulescu V., Design and synthesis of a diphosphonate metal-organic framework, *Proceedings of the 18$^{th}$ Symposium on analytical and environmental problem, Szeged, Hungary, 24 Septembrie*, 2012, 257-260

**5.** Maranescu B., Visa A., Maranescu V., Electronic properties determination of phosphonate divalent metal organic framework, *Proceedings of the 6th Symposium, New Trends and Strategies in the Chemistry of Advanced Materials, Timisoara, Romania, 8-9 noiembrie*, 2012,111-114

**6.** Maranescu B., A. Vişa, S. Iliescu, G. Ilia, Z. Simon, Synthesis and characterization of a new metal organic framework, *Proceedings of the 17$^{th}$ Symposium on analytical and environmental problems, Szeged, Hungary, 19 September*, 2011, 327-331

**7.** Vişa A., Maranescu B., A. Popa, G. Ilia, Unsaturated phosphonic acid, a novel precursor to fabricate metal organic frameworks, *Proceedings of the 17$^{th}$ Symposium on analytical and environmental problems, Szeged*, Hungary, 19 September, 2011, 323-326

**8.** Glevitzky M., Brusturean G. A., Perju D., Maranescu B., Heghedus G., Experimental modelling of thigness pet bottles influence on the qualities of soft drinks, *microCAD 2006 International Scientific Conference 16-17 March, 2006, Miskolc, Hungary*, 33-39

**9.** Pascariu A., Maranescu B.: Ethyl-bis(3-furyl)-phenylphosphoniu iodine as precursor of Witting reaction. Sinthesys and characterization. *Proceeding of the VIII$^{th}$ International Symposium ,,Young People and Multidisciplinary Research'' 11-12 Mai 2006,Timisoara, Romania*, 603-608

**10.** Maranescu B., Petric Mihaela, Palade Anca, Creanga Ionela, Simon Zeno, HPLC behavior of a new series of organophosphorus compound, *New trends and strategies in the chemistry of advanced materials*, 4-5 nov. Timisoara, 2010, 155-158

**11.** Creanga I., Armeanu I., Maranescu B., Făgădar-Cosma E.: The effect of conditions on manganese (III) metalloporphrin stability, *New trends and strategies in the chemistry of advanced materials, 5-6 nov., Timişoara, 2009*, 111-113

## D. LUCRĂRI ŞTIINŢIFICE ÎN REZUMAT PUBLICATE LA MANIFESTĂRI ŞTIINŢIFICE INTERNAŢIONALE

**1.** Visa A., Maranescu B., Lupa L., Metal(II) coordination polymers based on bisphosphonates or mixed imidazole ligands and bisphosphonates: green syntheses and applications 8$^{th}$ International Workshop of Materials Physics, *17-19 Mai 2023, Măgurele, Romania*, O-10, 32

**2.** Maranescu B., Visa A., Lupa L., Heterogeneous catalyst based on vinyl phosphonate in sustainable syntheses *8$^{th}$ International Workshop of Materials Physics, 17-19 Mai 2023*, Măgurele, Romania, P5, 81

**3.** Visa A., Maranescu B., Lupa L., Green Alternative Approaches to the Synthesis of Metal Organic Frameworks, *4$^{th}$ International Conference on Phosphonate Chemistry, Science and Technology, 2-4 Octombrie 2023 Heraklion, Greece*, L4, 15

**4.** Plesu N., Maranescu B., Visa A., The electrochemical oxidation of spent metal framework impregnated with ionic liquid, phenol degradation *4$^{th}$ International Conference on Phosphonate Chemistry, Science and Technology, 2-4 Octombrie 2023 Heraklion, Greece*, L21, 32

**5.** Visa A., *Maranescu B.*, Plesu N., Lupa L.Greener Alternatives for Phosphonate Metal Organic Frameworks Synthesis, Smart Diaspora 2023, 10-13 Aprilie 2023, Timișoara, Romania

**6.** Visa A., Maranescu B., Lupa L. Green Alternatives for Synthesis of Metal Organic Frameworks, 49$^{th}$ IUPAC World Chemistry Congress, 20-25 August 2023, Haga, Olanda, 737

***7.*** Iosivoni M., Maranescu B., Visa A., Phosphonate metal organic frameworks as environmentally friendly adsorbent materials, *New trends in Chemistry Research, Ed. 15, 21-22 Octombrie 2023,Romania,* 83

***8.*** Visa A., Maranescu B., Lupa L., Ionic Liquids-modified Metal Organic Frameworks: Preparation and Application in Adsorption, *9$^{th}$ IUPAC International Conference on Green Chemistry (9$^{th}$ ICGC), 5-9 September 2022, Athens, Greece, 144*

***9.*** Visa A., Maranescu B., Lupa L., Metal organic frameworks: complexity and diversity in structures and green applications, *13$^{th}$ Green Chemistry Postgraduate Summer School Online, 4-10 Iulie 2021, Venetia, Italia*

**10.** Maranescu B., Plesu N., Visa A., Phosphonic, Acid and Phosphonate Metal Organic Framework as Cheap, Safe and Easy to Handle with Potentially Retarded Corrosion Inhibiting Effect, *10$^{th}$ European Exhibition of Creativity and Innovation, 16-18 May 2019, Iasi, Romania*, 496

**11.** Visa A., Maranescu B., Muntean SG., Nistor A., Lupa L., Phosphonate Metal Organic Frameworks with N-donor Auxiliary Ligands: Diversity and Complexity in Structure and Applications, *12th International Conference on Advanced Nanomaterials,17-19 July 2019, Aveiro, Portugal*

**12.** Nistor M.A., Muntean S.G., Maranescu B., Visa A. Removal of dyes from aqueous solutions by phosphonate metal organic frameworks *21th Romanian International Conference on Chemistry and Chemical Engineering (RICCCE 21), 4-7 Septembrie, Mamaia, România, 2019*, S5-22

**13.** Maranescu B., Visa A., Effect of imidazole arrangements on proton-conductivity in divalent phosphonate metal-organic framework, *47th Iupac World Chemistry Congress, 7-12 July 2019, Paris, Franta*, 1337

**14.** Visa A., Maranescu B., Lupa L., Changes in structure and properties of phosphonates metal-organic framework by using auxiliary n-donor ligands, *47th Iupac World Chemistry Congress, 7-12 July 2019, Paris, Franta*, P0456, 1809

**15.** Visa A., Maranescu B., Lupa L., Metal phosphonates as promising corrosion inhibitors for mild steel, *New trends and strategies in the chemistry of advanced materials with relevance in biological systems, technique and environmental protection, 6-7 June 2019, Timisoara, Romania*, 19

**16.** Visa A., Maranescu B., Arico F., Phosphonate Metal Organic Frameworks as Heterogeneous Catalyst in Sustainable Green Solvent, *10th European Exhibition of Creativity and Innovation, 16-18 May 2019, Iasi, Romania*, 495

**17.** Maranescu B., Plesu N., Visa A., Metal phosphonates as promising corrosion inhibitors for mild steel, *New trends and strategies in the chemistry of advanced materials with relevance in biological systems, technique and environmental protection, 6-7 June 2019, Timisoara, Romania*, 67

**18.** Lupa L., Maranescu B., Visa A., Rare Earth Elements Removal from Aqueous Solutions by Phosphonates Metal Organic Frameworks, *10th European Exhibition of Creativity and Innovation, 16-18 May 2019, Iasi, Romania*, 497

**19.** Maranescu B., Ilia G., Lupa L., Visa A, Use of highly stable phosphonate metal organic framewoks as adsorbents for wastewater, *28th Symposium on Thermal Analysis and Calorimetry – Eugen Segal – of the Commission for Thermal Analysis and Calorimetry of the Romanian Academy (CATCAR28) & 2nd Symposium on Thermal Analysis and Calorimetry of Moldova (MoldTAC2), 9-10 mai 2019, Timisoara, Romania*, 60.

***20.*** Visa A., Maranescu B., Lupa L., Synthetic parameters influence on adsorption properties of metal organic frameworks based on phosphonates, *25th Jubilee Assembly of Advanced Materials Congress, 24-27 March 2019, Stockholm, Suedia*

**21.** Maranescu B., Lupa L., Visa A., Phosphonate metal organic framework: preparation and application, *11th Edition of symposium with international participation – New trends and strategies in the chemistry of advanced materials with relevance in biological systems, technique and environmental protection, 28-29 June 2018, Timisoara, Romania*, 76

**22.** Visa A., Maranescu B., Lupa L., Heterogenous catalyst for efficient organic transformation in green chemistry solvent, *11th Edition of symposium with international participation New trends and strategies in the chemistry of advanced materials with relevance in biological systems, technique and environmental protection, 28-29 June 2018, Timisoara, Romania*, 58

**23.** Maranescu B., Lupa L., Visa A., Phosphonic Acid vs Phoaphonate Metal Organic Framework Influence on Mild Steel Corrosion Protection, *11th International Conference on Advanced Nanomaterials,18-20 July 2018, Aveiro, Portugal*, ID-37

**24.** Vișa A., Maranescu B., Lupa L., Synthesis, Characterization and Rare Earth Elements Adsorption Properties of Phoaphonate Metal Organic Frameworks, *11th International Conference on Advanced Nanomaterials, 18-20 July 2018, Aveiro, Portugal*, ID-371

**25.** Maranescu B., Lupa L., Visa A., Adsorption of Metal Ions from Waste Waters by Conventional and Unconventional Metal Organic Frameworks Based on

Phosphonates, *8th International IUPAC Conference on Green Chemistry, 9-14 September 2018, Bangkok, Tailanda*, PL-017

**26.** Visa A., Lupa L., Maranescu B., Effect of coligands arrangements on adsorption properties of phosphonate metal organic frameworks, *8th International IUPAC Conference on Green Chemistry, 9-14 September 2018, Bangkok, Tailanda*, PL-016

**27.** Maranescu B., Visa A, Plesu N., Lupa L. Improved corrosion protection with metal organic frameworks based on phosphonates, *5th International Conference on Methods and Materials for Separation Processes "SEPARANTION SIENCE -THEORY AND PRACTICE", 26-30 August 2018, Kudowa Zdroj, Poland*, 168

**28.** Visa A., Maranescu B., Popa A., Lupa L. Study on adsorption of rare earth elements from waste waters with metal organic frameworks, *5th International Conference on Methods and Materials for Separation Processes "SEPARANTION SIENCE-THEORY AND PRACTICE", 26-30 August 2018, Kudowa Zdroj, Poland*

**29.** Nistor A., Muntean S., Maranescu B., Visa A., Removal of Acid Orange 7 dye from aqueos solutions, using metal organic frameworks based on phosphonates, XXth Symposium *"Young People and Multidisciplinary Research", 15-16 November 2018, Timisoara, Romania*

**30.** Maranescu B., Visa A., Lupa L., Determination of heavy metals in waste waters and their removal by phosphonate metal organic frameworks *10th Symposium New Trends and Strategies in the Chemistry of Advanced Materials, 8-9 Iunie 2017, Timisoara, Romania*, 72

**31.** Visa A., Maranescu B., Heterogenous catalyst application of phosphonate metal organic framework, *10th Symposium New Trends and Strategies in the Chemistry of Advanced Materials, 8-9 Iunie 2017, Timisoara, Romania*, 60

**32.** Maranescu B., Plesu N., Visa A., Maranescu V., Carboxyphosphonate metal accurate corrosion inhibitor for iron in diluted nitric acid saline solution, *20th Romanian International Conference on Chemistry and Chemical Engineering, 6-9 Septembrie, 2017, Poiana Brasov, Romania*, S3-283

**33.** Visa A., Maranescu B., Bucur A., Synthesis and characterization of a novel coordination polymer starting from zinc salt, *20th Romanian International Conference on Chemistry and Chemical Engineering, Poiana Brasov, Romania, 6-9 Septembrie, 2017, Poiana Brasov, Romania*, S6-282

**34.** Maranescu B., Plesu N., Maranescu V., Visa A., The corrosion inhibitor behavior of iron in saline solution by the action of carboxyphosphonate metal, *7th International IUPAC Conference on Green Chemistry, 2-5 Octombrie 2017 Moscova, Rusia*, 89

**35.** Visa A., Maranescu B., Lupa L., Use of metal organic frameworks as new efficient adsorbent materials in the removal process of Cd (II) from aqueous solutions, *7th International IUPAC Conference on Green Chemistry, 2-5 Octombrie 2017, Moscova, Rusia*, 101

**36.** Visa A., Maranescu B., Lupa L., Bucur B., Phosphonate metal organic frameworks: from synthesis to applications, *Proceedings of the 9th Symposium New Trends and Strategies in the Chemistry of Advanced Materials, 9-10 iunie 2016, Timisoara, Romania*, 19

**37.** Maranescu B., Lupa L., Bucur A., Visa A., Hydrothermal synthesis of metal organic framework based on carboxyphosphonate ligand, Proceedings of the *9th Symposium New Trends and Strategies in the Chemistry of Advanced Materials, 9-10 iunie 2016, Timisoara, Romania*, 92

**38.** Visa A., Maranescu B., Bucur A., Lupa L., The influence of synthetic parameters on the metal (II) carboxyphosphonate properties, *16th IUPAC Conference Polymer Organic Chemistry, 13-16 Iunie 2016, Hersonissos, Creta, Grecia*, PS 65, 117

**39.** Maranescu B., Lupa L., Visa A., Impressive diversity of applications for phosphonate metal organic frameworks, *16th IUPAC Conference Polymer Organic Chemistry, 13-16 Iunie 2016, Hersonissos, Creta, Grecia*, OR 31, 62

**40.** Visa A., Maranescu B., Grama R., Gabor A., Phosphonate metal organic frameworks as efficient heterogeneous catalyst, *6th EuCheMS Chemistry Congress, 11-16 Septembrie 2016, Sevilia, Spania,* No. 938

**41.** Maranescu B., Lupa L., Bucur A., Visa A., Ultrasound-assisted synthesis for phosphonates metal organic frameworks, *6th EuCheMS Chemistry Congress, 11-16 Septembrie 2016, Sevilia, Spania,* No. 943

**42.** Visa A., Maranescu B., Lupa L., Heavy metal removal from waste waters by phosphonate metal organic frameworks, *6th International IUPAC Conference on Green Chemistry, 4-8 Septembrie 2016, Venetia, Italia,* 337

**43.** Lupa L., Maranescu B., Visa A., Equilibrium and kinetic studies of chromium ions adsorption on Co (II) based phosphonate metal organic frameworks, *4th International Conference on Methods and Materials for Separation Processes, 4-8 Septembrie 2016, Brunow, Polonia,* 124

**44.** Maranescu B., Popa A., Lupa L., Visa A., Use of chitosan complex with aminophosphonic groups and cobalt for Sr (II) ions removal, *4th International Conference on Methods and Materials for Separation Processes, 4-8 Septembrie 2016, Brunow, Polonia,* 125

**45.** Visa A., Maranescu B., Arico F., Udrea I., Evaristo S., Phosphonate Metal Organic Framework as Heterogenous Catalyst for Methylation Reactions in Green Solvent, *15th International Conference "Polymers and Organic Chemistry" 10- 13 June 2014, Timisoara, Romania,* 96

**46.** Maranescu B., Visa A., Iliescu S., Popa A., Preparation and characterization of modified chitosan with aminophosphonic groups and his complex with cobalt, *15th International Conference "Polymers and Organic Chemistry" 10-13 June 2014, Timisoara, Romania,* 62

**47.** Maranescu B., Visa A., Maranescu V., Co–Vinyl Phosphonate Electrical Properties, *The 20th International Conference on Phosphorus Chemistry, 28 iunie-2 iulie 2014, Dublin, Irlanda,* P373

**48.** Visa A., Maranescu B., Bucur A., Spectroscopic Properties of New Cerium Metal–Organic Framework Based on Phosphonate Ligands with Vinyl Functional Group, *The 20th International Conference on Phosphorus Chemistry, 28 iunie-2 iulie 2014, Dublin, Irlanda,* P337

**49.** Maranescu B., Visa A., A study on the effect of synthesis parameters of a new divalent metal phosphonate, *International Conference of Physical Chemistry ROMPHYSCHEM 15, 11-13 September 2013,* Bucharest, Romania, 122

**50.** Visa A., Maranescu B., Mracec M., Electronic Properties of $Cu^{2+}$ vinylphosphonate Estimated by PM3 Semiempirical Method, *International Conference of Physical Chemistry ROMPHYSCHEM 15, 11-13 September 2013 Bucharest, Romania,* 37

**51.** Maranescu B., Visa A., Maranescu V., Ni – vinyl phosphonate electrical properties, *44th IUPAC World Chemistry Congress, 11-16 August 2013, Istanbul, Turcia,* 1202

**52.** Maranescu B., Visa A., Styryl phosphonic acid as precursor for new metal organic framework, *44th IUPAC World Chemistry Congress, 11-16 August 2013, Istanbul, Turcia,* 1198

**53.** Visa A., Maranescu B, Mircea M., Structural properties analyses of phosphonate metal organic framework, *44th IUPAC World Chemistry Congress, 11-16 August 2013, Istanbul, Turcia,* 1513

**54.** Visa A., Maranescu B., Bucur A., Studies on the salts effect on crystallinity of phosphonate metal organic framework, *44th IUPAC World Chemistry Congress, 11-16 August 2013, Istanbul, Turcia,* 906

**55.** Maranescu B., Visa A., Maranescu V., Ilia G., Mracec M., Cu-vinylphosphonate revealing semiconductor electrical behavior, *44th EuCheMS Chemistry Congress, 25-30 august 2012, Praga, Cehia,* P-0926, s1326

**56.** Visa A., Maranescu B., Ilia G., Mracec M., Phosphonates metal organic framework, *4th EuCheMS Chemistry Congress, Praga, Cehia, 25-30 august 2012,* P-1001, s1326

**57.** Visa A., Maranescu B., Bucur A., Synthesis and structural analysis of phosphonate divalent metal organic framework, *Proceedings of the 6th Symposium New Trends and Strategies in the Chemistry of Advanced Materials, 8-9 noiembrie, 2012,* Timisoara, Romania, 41

**58.** Popa A., Maranescu B., Pascariu A., Iliescu S., Ilia G., Polymer-supported phosphonates reagents: preparation in Michaelis-Arbuzov reactions and applications, *Complexing Agents between Science Industry Authorities and Users, 11-16 Martie 2007, Ascona, Switzerland,* 96

**59.** Glevitzky M., Maranescu B., Analytical Mathematic Modeling and Chromatographic Study of Soft Drinks, *International Conference of Physical Chemistry-ROMPHYSCHEM-12, 6-8 September, 2006, Bucuresti, Romania,* 37

**60.** Popa A., Ilia G., Iliescu S., Davidescu C., Pascariu A., Maranescu B., Plesu N.: Chemical modification of functional copolymers with benzaldehyde groups by phare transfer catalysed Witting reactions, *International Conference of Physical Chemistry-ROMPHYSCHEM-12 September 6-8, 2006, Bucuresti, Romania*,166

**61.** Ilia G., Iliescu S., Macarie L., Maranescu B., Pascariu A., Metal(II) phosphonates obtained by hydrothermal method, *International Conference of Physical Chemistry-ROMPHYSCHEM-12, September 6-8, 2006, Bucuresti, Romania*, 198

**62.** Maranescu B., Cosmiuc C.: Study of HPLC behaviour of phosphoramidic derivatives, Al VII - lea *Simpozion Internaţional Tinerii şi Cercetarea Multidisciplinară, 22-23 septembrie 2005, Reşita, România*, B-25

## F. LUCRĂRI ŞTIINŢIFICE ÎN REZUMAT PUBLICATE LA MANIFESTĂRI ŞTIINŢIFICE NAŢIONALE

**1.** Plesu N., Maranescu B., Macarie L., Visa A., Anticorrosive effect of phosphonate metal organic frameworks on mild steel, *A XXXVI-a Conferinta nationala de chimie – CNChim, Octombrie 5-7, 2022, Calimanesti – Caciulata, Romania, CS.C-2,* 34

**2.** Visa A., Maranescu B., Popa A., Lupa L., Metal organic frameworks: from green synthesis tgreen applications, *A XXXVI-a Conferinta nationala de chimie – CNChim, Octombrie 5-7, 2022, Calimanesti – Caciulata, Romania,* C.S. V-8

**3.** Ghit S., Maranscu B., Lupa L., Visa A., Utilizarea rețelelor metal organice fosfonice în tratarea apelor prin adsorbție, *Simpozion on-line AquaSensTim, 22 Martie 2021, Timișoara, Romania*

**4.** Maranescu B., Visa A., Simulescu V., Synthesis and Characterization Of New Unsaturated Layered Metal Phosphonates, *Proceedings of the 13th Timisoara`s Academic Days, 13-14 Iunie, 2013, Timisoara, Romania*, 55

**5.** Visa A., Maranescu B., Bucur A., Phosphonate Metal Organic Framework Synthesis For Diverse Applications, *Proceedings of the 13th Timisoara`s Academic Days, 13-14 Iunie, 2013, Timisoara, Romania*, 49

**6.** Maranescu B., Vişa A., Iliescu S., Popa A, Sayti L, Simon Z., Electronic and geometric properties of unsaturated phosphonate metal organic framework, *Lucrările Simpozionului Zilele Academice Timişene, ediţia a XII a, 2011,* 56

**7.** Vişa A., Maranescu B., Iliescu S., Popa A., Ilia G., Mracec M., Phosphonate metal organic framework used as gas filtration estimated by $PM_3$ semiemprical method, *Lucrările Simpozionului Zilele Academice Timişene, ediţia a XII a, 2011,* 60

**8.** Creangă I., Armeanu I., Maranescu B., Palade A., Senzor optic de pH în domeniul spectral UV-VIS bazat pe tetraclorura de Zn (II)-5,10,15,20- tetrakis (N-metil-4-piridil) porfirina, *Contribuţii ale tinerilor cercetători la dezvoltarea direcţiilor prioritare în chimie, 13 Mai, Timisoara, 2010*, 13

**9.** Armeanu I., Creangă I., Palade A., Maranescu B., Nouă structură de meso- porfirină mixtă $A_3B$. Obţinere şi caracterizare comparativă cu Zn (II)-metalporfirina corespunzătoare,

*Contribuţii ale tinerilor cercetători la dezvoltarea direcţiilor prioritare în chimie, 13 Mai, Timisoara, 2010*

**10.** Grad M., Szabadai Z., Simu G., Maranescu B., Lupea X., Colour analysis of chromogens derivatives of 4,4-diaminostilbene-2,2-disulphonic acid, *Lucrările Simpozionului Zilele Academic Timişene, ediţi a XI a, 28-29 Mai, 2009*, 35

**11.** Maranescu B., Maranescu V., Super-termoconductives polymers in heat sink and package manufacturing – modeling to improve cooling techniques design and simulation precision, *Lucrările Simpozionului Zilele Academice Timişene, ediţia a X a, 24-25 mai, 2007*, 35

**12.** Szabadai Z., Maranescu B., Fotodegradarea acetatului de retinil in regim de curgere continuă, *A XXVIII-a Conferinta Naţională de Chimie, Călimăneşti-Căciulata, Vâlcea*, 4-6 octombrie, 2006,108

**13.** Cozmiuc C., Maranescu B., Compuţi diazotaţi substituiţi: sinteza, caracterizare, activitate biologică, A XXVIII-a *Conferinta Naţională de Chimie, Călimăneşti-Căciulata, Vâlcea, 4-6 octombrie, 2006*, 67

**14.** Moldovan R., Simu G., Muntean S., Maranescu B., Ilia G.: Tehnici de caracterizare a arilazofosfonaţilor, *Lucrările Simpozionului Zilele Academice Timişene, ediţia a IX a Timişoara, 26-27 mai, 2005*

**15.** Fuliaş A., Fagadar-Cosma E., Vlascici D., Maranescu B., Cozmiuc C., Studiul comparativ al obţinerii şi caracteristicilor HPLC, UV-vis şi IR ale complecşilor de tip monomer şi dimer ai meso- tetrafenilporfirinei cu Zr(IV), *Lucrările Simpozionului Zilele Academice Timişene, ediţia a IX a, Timişoara, 26-27 mai 2005*

**16.** Maranescu B., Szabadai Z., Cozmiuc C., Ilia G., Crisan L., HPLC separation of phosporamidic acid derivatives. Corerrelation of structure with separation parameters, *Lucrările Simpozionului Zilele Academice Timişene, ediţia a IX a, Timişoara, 26-27 mai 2005*

**17.** Fagadar-Cosma E., Maranescu B., Fagadar-Cosma G., Pascariu A., Bilan S: The Study about synthesis, caracterization and biological activity of a phosphonium compound, A XXVIII-a *Conferinţa Naţională de Chimie, Călimăneşti-Căciulata, Vâlcea, 6-8 oct. 2004*, 109

**18.** Maranescu B., Szabadai Z, Constantin Cozmiuc C., Ilia G., Studiul fototransformării1,4-dihidro-2,6-dimetil-4-(2-nitrofenil)-3,5-piridin-carboxilatului de metil, *A XXVII-a Conferinţa Naţională de Chimie, Călimăneşti-Căciulata, Vâlcea, 6-8 oct. 2004*, 107

## G. CAPITOLE CARTE:

**1.** B. Maranescu, A. Visa, Metal-Organic Framework Composites IPMC Sensors and Actuators, Inamuddin and A. M. Asiri (eds.), Ionic Polymer Metal Composites for Sensors and Actuators, Engineering Materials, *Springer Publisher, 2019*, 1-19, https://doi.org/10.1007/978-3-030-13728-1_1, *Prezente în 193 de librării*

**2.** Visa A., Maranescu B., Ilia G., Hypophosphorous Acid and Its Salts as Reagents in Organophosphorus Chemistry, in Chemistry Beyond Chlorine, Editors: Tundo, P., He, L.-N., Lokteva, E., Mota, C. (Eds.), *Springer Publisher, 2016*, 137-168, ISBN 978-3-319-30073-3, *Prezente în 255 de librării*

**3.** Visa A., Plesu N., Ilia G., Maranescu B., (Q)SAR methods used in MOFs studies, *Springer Handbook of Chem- and Bioinformatics*: *Ed. Springer, 2024*, 21pag, *acceptat*

[redacted]