

LISTA LUCRĂRILOR ȘTIINȚIFICE

Teza de doctor și Rezumatul tezei de doctor în științe chimice, *Sinteza și caracterizarea polimerilor coordinativi ai Zn(II) și Cd(II) în baza liganzilor punte azinici și azometinicii*, Autor Lozovan Vasile, specialitatea 141.01. CHIMIE ANORGANICĂ, CHIȘINĂU, 2021. <http://www.cnaa.md/thesis/57058/>

Articole în reviste științifice cotate în baza de date ISI și SCOPUS.

1. **Vasile Lozovan**, Victor Ch. Kravtsov, Yurii M. Chumakov, Natalia V. Costriucova, Nikita Siminel, Oleg Petuhov, Titus Vlase, Gabriela Vlase, Alic Barba, and Marina S. Fonari. Zn(II) and Cd(II) Metal–Organic Frameworks with Azine-Functionalized Pores: Crystal Structures, Photoluminescence, Solvent Exchange, and Molecular Simulations of Carbon Dioxide Binding Sites, April 24, *Cryst. Growth Des.* 2023, 23, 5, 3171–3185. <https://doi.org/10.1021/acs.cgd.2c01345>
2. **Vasile Lozovan**, Victor Ch. Kravtsov, Natalia V. Costriucova, Anatolii V. Siminel, Olga V. Kulikova, and Marina S. Fonari. Tunability in dimension, metal and ligand coordination modes and emission properties in Cd(II) and Zn(II) coordination networks based on 4,4'-(hydrazine-1,2-diylidenebis(methanylylidene)) dibenzoic acid linker. In: *Journal of Solid State Chemistry*, June 2022, Vol. 310, 123021. <https://doi.org/10.1016/j.jssc.2022.123021>
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7. **LOZOVAN, V.**, CH. KRAVTSOV, V., COROPCEANU, E.B., ROTARU, P., SIMINEL, A.V., FONARI, M.S. Binuclear and polymeric Zn(II) and Cd(II) coordination compounds with chromophore N-((pyridin-4-yl)methylene)benzene-1,4-diamine obtained in situ: Preparation, structural and spectroscopic study. In: *Inorganica Chimica Acta*, 2019, vol. 491, pp. 42-51. <https://doi.org/10.1016/j.ica.2019.03.034>
8. **LOZOVAN, V.**, COROPCEANU, E.B., BOUROSH, P.N., MICU, A., FONARI, M.S. Coordination Polymers of Zn and Cd Based on Two Isomeric Azine Ligands: Synthesis, Crystal Structures, and Luminescence Properties. In: *Russian Journal of Coordination Chemistry*, 2019, vol. 45, nr. 1, pp. 11-21. <https://doi.org/10.1134/S107032841901007X>

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1. **LOZOVAN, V.**, COROPCEANU, E.B., BOLD, V., BOUROSH, P.N. Sinteza noilor liganzi dipiridinici și asamblarea compușilor coordinativi în baza lor. In: *A XXXIV-a Conferință Națională de Chimie*, Ediția a XXXIV-a, 04 – 07 oct., 2016, Călimănești-Căciulata, România, P.S.II. – 14, p. 14.
2. **LOZOVAN, V.**, COROPCEANU, E.B., BOUROSH, P.N. Synthesis and crystal structure of 1D Coordination Polymer Zn(II) with Schiff-base N,N'-Type Ligand. In: *Multidisciplinary in Modern*

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 5. **LOZOVAN, V.**, KRAVTSOV, V.CH., COROPCEANU, E.B., FONARI, M.S. Two Three-Dimensional Cd(II) Coordination Polymers Based On Isomeric Bidentate Schiff Base Ligands. In: *XIII Международная научная конференция „Проблемы сольватации и комплексообразования в растворах”* 1-6 iul., 2018, Суздаль, Россия, p. 206. ISBN 978-5-904580-56-8.
 6. **LOZOVAN, V.**, KRAVTSOV, V.CH., COROPCEANU, E.B., FONARI, M.S. New Ditopic Ligand 4-((Pyridin-4-Ylmethylene)Amino)Aniline - A Useful Linker In Crystal Design Of Binuclear And Polymeric Zn Coordination Compounds. In: *XIII Международная научная конференция „Проблемы сольватации и комплексообразования в растворах”* 1-6 iul., 2018, Суздаль, Россия, p. 205. ISBN 978-5-904580-56-8.
 7. **LOZOVAN, V.**, KRAVTSOV, V.CH., COROPCEANU, E.B., FONARI, M.S. From Binuclear Complex To Two-Dimensional Coordination Polymer Originated From Zinc Sulfate And 4-Bis(4-Pyridyl)-2,3-Diaza-1,3-Butadiene Ligand, In: *XX Ukrainian Conference On Inorganic Chemistry*, 17-20 sept., 2018, Dnipro, Ukraine, P16, p. 42. ISBN 978-966-981-038-0.
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 9. **LOZOVAN, V.**, KRAVTSOV, V.CH., COROPCEANU, E.B., ROTARU, P., PETUHOV O., FONARI, M.S. Thermal Analysis Of Binuclear Zn(II) Coordination Compound And New Bidentate Ligand, In: *The 12th European Symposium on Thermal Analysis and Calorimetry (ESTAC12)*. 27-30 aug., 2018, Brasov, Romania, PS2.171, p. 537. ISBN 978-3-940237-50-7.
 10. **LOZOVAN, V.**, KRAVTSOV, V.CH., COROPCEANU, E.B., FONARI, M.S. One-dimensional coordination polymers of Zn and Cd assembled from 2-thiophenecarboxylic acid and 1,2-bis(pyridin-4-ylmethylene)hydrazine ligands. In: *XXXV-Th Romanian Chemistry Conference*. Ediția a XXXV-a, 2-5 oct., 2018, Călimănești-Căciulata, Romania P.S.II.-28, p. 219.
 11. **LOZOVAN, V.**, KRAVTSOV, V.CH., COROPCEANU, E.B., FONARI, M.S. Thermal analysis of Zn(II) coordination polymer assembled via organic and inorganic bridging ligands. In: *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 May, 2019, West University of Timișoara (UVT), P34, p. 67. ISBN 978-606-675-208-4.
 12. **LOZOVAN, V.**, KRAVTSOV, PETUHOV O., V.CH., COROPCEANU, E.B., FONARI, M.S. Thermal analysis of Cd(II) coordination polymers assembled from bridging sulfate anions and N,N'-donor Schiff base ligands. In: *5th Central and Eastern European Conference on Thermal Analysis and Calorimetry (CEEC-TAC5) and 14th Mediterranean Conference on Calorimetry and Thermal Analysis (Medicta2019)*. 27-30 aug., 2019, Rome, Italy, PS2,017, p. 307. ISBN 978-3-940237-59-0.
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 14. **LOZOVAN, V.**, KRAVTSOV, V.CH., COROPCEANU, E.B., FONARI, M.S. Two- And Three-Dimensional Cd(II) Coordination Polymers Assembled From Bridging Sulfate Anions And Isomeric N,N'-Donor Schiff Base Ligands. In: *International Conference Achievements And Perspectives Of Modern*

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 22. **V. N. LOZOVAN**, Victor Ch. KRAVTSOV, Marina S. FONARI, 3D Cd(II) COORDINATION POLYMER ASSEMBLED FROM BIPHENYL-4,4'-DICARBOXYLIC ACID AND N,N'-(1,4-PHENYLENE) BIS(1-(PYRIDIN-4-YL)METHANIMINE) LIGANDS, In: "New trends and strategies in the chemistry of advanced materials with relevance in biological systems, technique and environmental protection" 13th Edition, Timisoara, October 07-08, 2021.
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 25. **Vasile LOZOVAN**, Ion BULHAC, Paulina BOUROȘ, Victor KRAVȚSOV, Structura cristalină și studiul spectroscopic IR al complexilor macrociclici [Cu(HL)Cl] și [Cu(HL)Br], Conferința științifico-practică internațională „INSTRUIRE PRIN CERCETARE PENTRU O SOCIETATE PROSPERĂ” Ediția a-X-a 18-19 martie 2023, Vol.1, pag. 306-309. ISBN 978-9975-46-716-2.

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1. MOȘANU, Elena; SANDU, Maria; **LOZOVAN, Vasile**; BÎRCA, Natalia; BEIU, Marina; CARP, Alina. Calitatea apei pârâului și fântânilor din localitatea Sireți. In: *Acta et commentationes. Științe Exacte și ale Naturii*. 2017, nr. 1(3), pp. 88-93. ISSN 2537-6284. https://ibn.idsi.md/vizualizare_articol/65467

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Brevet de invenție:

LOZOVAN Vasile, FONARI Marina, KRAVȚOV Victor, SIMINEL Nikita, COROPCEANU Eduard, KULIKOVA Olga, COSTRIUCOVA Natalia; *Polimer unidimensional al cadmiului(II) în baza liganzilor 1,2-bis(piridin-4-ilmetilen)hidrazină și acid 2-aminobenzoic, care manifestă activitate fotoluminescentă și capacitate de schimb a moleculelor de solvent*. Aviz pozitiv la cerere de brevet 29.09.2021. Publicare: 30 noi 2021. Nr. 4776 B1.

Participare la saloane de invenții

Euroinvent, European Exhibition Of Creativity And Innovation, Iași, 14th edition, 26-28 MAY 2022, Aprecieri – medalia de argint

International Exhibition of Inventions and Innovations “*Traian Vuia*” Timișoara, 8th edition, June 08-10, 2022, Aprecieri – medalia de aur

Lucrări metodice

Melentiev E., **Lozovan V.**, Coropceanu E., Chimie coordinativă. Lucrări practice (Exerciții și probleme). Lucrări de laborator (Obținerea compușilor coordinativi. Studiu calitativ și cantitativ). Chișinău: UST. 2018. 119 p.