

Publications 2025

1. *Antitumor activity of ruthenium(III) complexes with [N₂O₂]-tetradentate Schiff base ligands*, Z. Petrova, T. Mocanu, R. Spasov, A. Hanganu, G. Marinescu, D.C. Culita*, R. Alexandrova, *Journal of Inorganic Biochemistry*, **2025**, 266, 112853.
2. *Rare α -MoO₃-K₂Mo₄O₁₃ hybrid structures obtained via single molecular precursor approach*, L. Preda, D. Visinescu*, E. I. Neacsu, M. Marcu, T. Spataru, C. D. Ene, S. Preda, V.-A. Surdu, B. S. Vasile, R. D. Truşcă, A.-I. Nicoară, E. M. Soare, M.-G. Alexandru, A.-C. Ianculescu, *Dalton. Trans.*, **2025**, 54(30), 11588.
3. *Hibiscus rosa-sinensis - mediated synthesis of cobalt-zinc aluminate nanoparticles, characterization and their applications as pigments*, D. Gingasu, A.-C. Ianculescu, B.S. Vasile, R.D. Trusca, J.M. Calderon Moreno, G. Marinescu, S. Somacescu, D.C. Culita, C.-D. Negut, S. Preda, *Materials Science and Engineering: B*, **2025**, 319, 118367.
4. *Novel Magnetically Recoverable Amino-Functionalized MIL-101(Fe) Composite with Enhanced Adsorption Capacity for Pb(II) and Cd(II) Ions*, C. M. Simonescu, D.C. Culita*, G. Marinescu, I. Atkinson, V. Marinescu, O. Oprea, N. Stanica, *Molecules*, **2025**, 30, 2879.
5. *A sustainable approach for the synthesis of magnesium aluminate spinel towards photocatalytic applications*, O. Oprea, D. Gingasu*, D.C. Culita, J.M. Calderon-Moreno, G. Marinescu, S. Preda, *Journal of Materials Science*, **2025**, 60(22), 9242.
6. *Bioinspired gold–titanium dioxide nanoparticles for infection control and wound healing enhancement*, S.N. Voicu, I.C. Marinaş, M. Stoian, A. Kuncser, F. Neatu, M. Florea, M. Tudose*, M.D. Gaboreanu, M.C. Chifiriuc, *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2025**, 725, 137632.
7. *Luminescent tetranuclear zinc complexes constructed from a tetradentate Schiff-base ligand derived from 2,3-dihydroxybenzaldehyde*, D.I. Eftemie, T. Mocanu, C. Tablet, M. Raduca, D. Dragancea, M. Andruh, *Journal of Coordination Chemistry*, **2025**, 78(1-3), 193.
8. *Design of a new nitronyl-nitroxide biradical and its complexes: synthesis, crystal structures and magnetic properties*, C.A. Spinu, G. Novitchi, M. Hillebrand, T. Mocanu, G. Ionita, A. Hanganu, V. Tecuceanu, M. Andruh, *CrystEngComm*, **2025**, 27, 6462.
9. *Comprehensive analysis of the inhibition of aldehyde dehydrogenase from Flavobacterium PL002 and its coupling with SERS as a path for the selective detection of thiram*, A.I. Ftodiev, G.N. Petrareanu, M. Puiu, G. Proteasa, C.V.A. Munteanu, R.M. Banciu, R. Chauhan, D. Visinescu,

C. Purcarea, P. Fanjul-Bolado, D. Ibañez, R. Fogel, J. Limson, M. Potara, A.F. Bonciu, S. Astilean, C. Bala, A. Vasilescu, *Methods*, **2025**, DOI: 10.1016/j.ymeth.2025.10.006.

10. *Distortion of charge carrier trapping centers during incipient phase transformations in TiO₂ can enhance its photocatalytic performance*, A.C. Iacoban, A.M. Rostas, C.G. Mihalcea, I.D. Vlaicu, D. Culita, M.C. Ilas, M Florea, S. Neatu, F. Neatu, M. Secu, T. Popescu, *J. Alloys Compd.* **2025**, 1018, 179097.

11. *Catalytic synthesis of lactic acid from cellulose over easily-prepared niobium-doped titania by solution combustion synthesis*, C.E. Stavarache, A. Khosravi, M.M. Marin, J. Pandele-Cusu, S.E. Lazar, F. Papa, V. Fruth, D. Culita, N.I. Cristea, S. Karakoulia, K. Triantafyllidis, M.N. Verziu, *Biomass and Bioenergy*, **2025**, 194, 107687.

12. *Mononuclear and binuclear nickel(II) complexes with a Schiff base ligand derived from 2,3-dihydroxybenzaldehyde*, D.-I. Eftemie, T. Mocanu, D. Dragancea, M. Răducă, M. Andruh, *Rev. Roum. Chim.*, **2025**, acceptat.

13. *Coordination polymers constructed from binuclear copper(II) carbohydrazone nodes and bis(4-pyridyl) spaces*, N. Talmaci, T. Mocanu, S. Shova, M. Răducă, D. Dragancea, M. Andruh, *Rev. Roum. Chim.*, **2025**, 70, 443–453.