

Publications 2022

1. *Novel Magnetic Nanocomposites Based on Carboxyl-Functionalized SBA-15 Silica for Effective Dye Adsorption from Aqueous Solutions*, C.M. Simionescu, D.C. Culita*, A. Tatarus, T. Mocanu, G. Marinescu, R.A. Mitran, I. Atkinson, A. Kuncser, N. Stanica, *Nanomaterials* **2022**, *12*, 2247.
2. *Soft chemistry synthesis method of ZnAl_{2-x}Cr_xO₄ spinel: Structural, morphological, optical and photocatalytic properties*, D. Gingasu, D. Culita, J.M. Calderon Moreno, O. Oprea, G. Marinescu, S. Preda, A. Kuncser, *Materials Today Communications* **2022**, *33*, 104656.
3. *Soft Chemistry Synthesis and Characterization of CoFe_{1.8}RE_{0.2}O₄ (RE³⁺ = Tb³⁺, Er³⁺) Ferrite*, D. Gingasu, I. Mindru, A.-C. Ianculescu, L. Diamandescu, V.-A. Surdu, G. Marinescu, C. Bartha, S. Preda, M. Popa, M.C. Chifiriuc, *Magnetochemistry* **2022**, *8*, 12.
4. *Benign by design: porous spherical ZnO-alginate family via a dual-template synthesis*, C.D. Ene, P. Cucos, A. Ianculescu, D.C. Culita, E.M. Anghel, A. Cucos, I. Atkinson, M.C. Chifiriuc, J.M. Calderón-Moreno, O. Carp, *Appl. Surf. Sci.*, **2022**, *580*, 152231.
5. *Synthesis, structural characterization and cytotoxic activity in tumor cells of Cu(II) and Co(II) complexes with o-vanillin aminoacids Schiff bases*, D. Dinev, K.B. Popova, T. Zhivkova, L. Dyakova, A. Abudalleh, R. Alexandrova, D. Culita, T. Mocanu, C. Maxim, G. Marinescu, *Appl. Organomet. Chem.*, **2022**; e6862. <https://doi.org/10.1002/aoc.6862>
6. *Zinc(II) and copper(II) complexes constructed from new bis(1 H -1,2,3-triazole-4-carboxylate)-based ligands*, Pedro N. Batalha, T. Mocanu, S. Calancea, M.G.F. Vaz, M. Andruh, *Journal of Molecular Structure*, **2022**, *1259*, 132703.
7. *New Cyanido-Bridged Complexes of Zn(II) and/or Ag(I) with TPymT and Tptz Ligands: Synthesis, Structural and Fluorescent Properties*, D. Visinescu, S. Shova, D.L. Popescu, M.G. Alexandru, *Crystals*, **2022**, *12*, 1618.
8. *Enantiomeric pairs of copper(II) complexes with tridentate Schiff bases derived from R- and S-methionine: the role of decorating organic groups of the ligand in crystal packing and biological activity*, C. Maxim, C.D. Ene,* I. Nicolau, L.L. Ruta, I.C. Farcasanu*, *Dalton Trans.*, **2022**, *51*(48), 18383.
9. *Redox active extended networks constructed from the three-fold symmetrical TPymT ligand [2,4,6-Tris(2-pyrimidyl)-1,3,5-triazine] and silver(I) ions*, C. Lete, D. Visinescu, S. Shova, C. Maxim, M.G. Alexandru. *J. Solid State Chem.*, **2022**, *313*, 123292.
10. *Laccase -TEMPO as an Efficient System for Doxorubicin Removal from Wastewaters*, I. Jinga, M. Tudose, P. Ionita, *Int. J. Environ. Res. Public Health*, **2022**, *19*, 664.

11. *Synthesis and Characterization of Hematite-based Nanocomposites as Promising Catalysts for Indigo Carmine Oxidation*, A.C. Kuncser A.M. Rostas, R. Zavoianu, O. D. Pavel, I. D. Vlaicu, M. Badea, D.C. Culita, A. Tirsoaga, R. Olar, *Nanomaterials*, **2022**, *12*, 2511.
12. *Facile synthesis of low toxicity iron oxide/TiO₂ nanocomposites with hyperthermic and photo oxidation properties*, T. Popescu, C.O. Matei, D.C. Culita, V.A. Maraloiu, A.M. Rostas, L. Diamandescu, N. Iacob, T. Savopol, M.C. Ilas, M. Feder, A.R. Lupu, A.C. Iacoban, I.D. Vlaicu, M. G. Moisescu, *Scientific Reports*, **2022**, *12*, 6887.
13. *Antibacterial and Photocatalytic Coatings Based on Cu-Doped ZnO Nanoparticles into Microcellulose Matrix*, M. Bușilă, V. Mușat, R. Dinică, D. Tutunaru, A. Pantazi, D. Dorobantu, D.C. Culita, M. Enăchescu, *Materials*, **2022**, *15*, 7656.
14. *Mesoporous Bioactive Glass Nanoparticles in the SiO₂-P₂O₅-CaO-MO (M = Mg, Zn) System: Synthesis and Properties*, A.I. Damian-Buda, C.D. Ghitulica, A. Cucuruz, G. Voicu, D. Culita, V. Fruth, L.T. Ciocan, *Journal of Functional Biomaterials*, **2022**, *13*, 180.
15. *Copper(II) Oxide Nanoparticles Embedded within a PEDOT Matrix for Hydrogen Peroxide Electrochemical Sensing*, C. Lete, A.-M. Spinciu, M.-G. Alexandru, J. Calderon Moreno, S.-A. Leau, M. Marin, D. Visinescu*, *Sensors*, **2022**, 8252.
16. *Novel antitumor agents based on fluorescent benzofurazan derivatives and mesoporous silica*, M. Tudose, D.C. Culita, R.D. Baratoiu-Carpen, R.A. Mitran, A. Kuncser, C. Romanitan, R.C. Popescu, D. I. Savu, *Int. J. Mol. Sci.*, **2022**, *23*, 15663.