

List of Publications:

1. D.A. Magdas, A. Pirnau, I. Feher, F. Guyon, I.B. Cozar, Alternative approach of applying H-1 NMR in conjunction with chemometrics for wine classification, *LWT-Food Science And Technology*, 109, 422-428(2019)
2. T. Szoke-Nagy, A.S. Porav, C. Coman, I.B. Cozar, N.E. Dina, C. Tripon, Characterization of the Action of Antibiotics and Essential Oils against Bacteria by Surface-Enhanced Raman Spectroscopy and Scanning Electron Microscopy, 52(1), 190-200(2019)
3. I.B. Cozar, A. Colnita, T. Szoke-Nagy, AM.R. Gherman, N.E. Dina, Label-Free Detection of Bacteria Using Surface-Enhanced Raman Scattering and Principal Component Analysis, *Analytical Letters*, 52(1), 177-189,(2019)
4. D.A. Magdas, S.C. Pinzaru, F. Guyon, I. Feher, I.B. Cozar, Application of SERS technique in white wines discrimination, *Food Control*, 92, 30-36(2018)
5. N.S. Vedeanu, I.B. Cozar, R. Stanescu, R. Stefan, D. Vodnar, O. Cozar, Structural Investigation of V2O5-P2O5-K2O Glass System with Antibacterial Potential, *Bulletin of Materials Science*, 39(3), 697-702,(2016)
6. I.B. Cozar, A. Pirnau, L. Szabo, N. Vedeanu, C. Nastasa, O. Cozar, Spectroscopic and DFT Investigation of Benzaldehyde Isonicotino - Hydrazide Compound, *Romanian Journal of Physics*, 61(7-8), 1265-1275,(2016)
7. I. B. Cozar, A. Pirnau, L. Szabo, N. Vedeanu, C. Nastasa, Spectroscopic and Computational Investigation of a Thiazolidine-2, 4-Dione Compound, *Romanian Reports In Physics*, 68, 630-641,(2016)
8. N. Cioica, R. Fechete, C. Filip, I.B. Cozar, C. Cota, E.M. Nagy, NMR and SEM Investigation of Extruded Native Corn Strach with Plasticizers, *Romanian Journal of Physics*, 60,3-4, 512-520(2015)
9. S.C. Pinzaru, C. Muller, S. Tomsic, M.M. Venter, I.B. Cozar, B. Glamuzina, New SERS Feature of β -Carotene: Consequences for Quantitative SERS Analysis, *Journal Of Raman Spectroscopy*, 46(7), 597-604(2015)
10. I. B. Cozar, A. Pirnau, N. Vedeanu, C. Nastasa, Structural Investigation of a New Antimicrobial Thiazolidine Compound , *Processes in Isotopes and Molecules* , 1565, 34-38 (2013)

11. R. Stanescu, N. Vedeanu, I.B. Cozar, A. Magdas, Processes in Isotopes and Molecules, Structural Investigation of Phosphate - Bismuth Glasses with Vanadium, 1565, 122-125(2013)
12. C. Ivascu; Ionut Bogdan Cozar; L. Daraban; Grigore DAMIAN, Spectroscopic investigation of P₂O₅-CdO-Li₂O glass system, Journal of Non-Crystalline Solids, 359, 60-64(2013)
13. L. Szabo, L.F. Leopold, I.B. Cozar, N. Leopold, K. Herman, V. Chiş, SERS approach for Zn(II) detection in contaminated soil, Central European Journal of Chemistry, 9, 410-414(2011)
14. O. Cozar, I. Bratu, L. Szabo, I.B. Cozar, V. Chiş, L. David, IR and ESR study of copper (II) complexes with ¹⁵N-Labelled Lysine and Ornithine, J. Molec. Structure, 993, 397-403(2011)
15. I.B.Cozar, L.Szabo, N.Leopold, V.Chiş, O.Cozar, L.David, IR, Raman, SERS and DFT Study of Pindolol and Verapamil, J. Molec. Structure, 993, 308-315(2011)
16. O.Cozar, L.Szabo, I.B.Cozar, N.Leopold, L.David, C.Căinap, V.Chiş, Spectroscopic and DFT study of atenolol and metoprolol and their copper complexes, J. Molec. Structure, 993, 357-366(2011)
17. I.B.Cozar, L.Szabo, D. Mare, N.Leopold, V.Chiş, L. David, IR, Raman, SERS and DFT Study of Paroxetine, J. Molec. Structure, 993, 243-248(2011)
18. I.B.Cozar, L.Szabo, L.Mogonea, O.Cozar, L.David, EPR Investigation of two Cu(II) complexes with low symmetry, J. Opt. Adv. Materials, 12(8), 1799-1804(2010)
19. A. Debreczeni, E. Forizs, A. Pătruţ, A.Z. Kun, I.B.Cozar, L.David, I. Silaghi-Dumitrescu, Synthesis, structure and DFT calculations on Theophylline complexes of palladium (II), Rev. Roum. Chimie, 55, 697-704 (2010)
20. I.B.Cozar, L.Szabo, N.Leopold, V.Chiş, L.David, Raman, SERS and DFT Study of Atenolol and Metoprolol Cardiovascular Drugs, Romanian Journal of Physics, 55(7-8), 772-781(2010)
21. A. Bebu, I.B.Cozar, L.Mogonea, D.Coza, Cs. Nagy, L.David, Spectroscopic Studies of some Metallic Complexes with Phenylalanine as Ligand, Studia UBB, seria Physica, 54(2), 23 – 32(2009)
22. M.Huber, A. Stănilă, A. Marcu, I.B.Cozar, L.David, Physico-Chemical and Spectroscopic Investigations of New Metallic Complexes with Phenylalanine as Ligand, Proceeding of Physics Conference, Timișoara 28-29 nov. 2008 (M.Bunoiu, I.Mălăiescu Eds.), American Institute of Physics (AIP), Melville, New-York, vol. 1131, 2009, p.197-202

23. N.L.Mogonea, I.Hauer, D.Cozma, I.B.Cozar, A. Marcu, L.David, Spectroscopic Investigation of Some - Polyxometalate Complexes, *Studia UBB, seria Physica*, 53(2), 23 – 30(2008)
24. L.Szabo, I.B.Cozar, N.Leopold, A. Pîrnău, Metal – Chelating Compound Investigated by Raman Spectroscopy, *Studia UBB, seria Physica*, 53(1), 65 – 72(2008)
25. N.Leopold, V.Chiș, I.B.Cozar, L.Szabo, A. Pîrnău, O.Cozar, Raman, SERS and DFT investigation of two metal-chelating compounds, *Optoelectronics and Advanced Materials - Rapid Communications 2 (5)*, 278-283(2008).

Participation in Conferences:

1. Studii structurale asupra unor molecule cu proprietati de recunoastere cationica, N. Leopold, I.B.Cozar, V. Chis, L. Szabo, O. Cozar, Simpozionul national de biomateriale “Biomateriale si aplicatii medico-chirurgicale” editia a VI-a, Cluj-Napoca, Romania, 18-20, p.27, octombrie, 2007
2. Experimental and DFT Study of 4-(2-Pyridylazo) Resorcinol and Its Metal Complexes, L. Szabo, A. Parnau, N. Leopold, V. Chis, A. Aluas. I.B.Cozar, The 13th ICIT Conference With International Participation “Progress In Cryogenics and Isotopes Separation” Calimanesti–Caciulata, Romania, p. 86, November 7-9, 2007
3. Spectroscopic Investigations On Some Biomolecules With Chelation Therapy Proprieties, I.B.Cozar, N.Leopold, V.Chis ,L. Szabo, A. Parnau, International Conference of Fundamental Sciences, Physica, Baile Felix, Romania, p. 27, 9-10th November, 2007

4. Spectroscopic Investigations Of Some Cu(II) Cardiovascular Complexes, O.Cozar, L.Szabo, F.Dragan, I.B.Cozar, N.Leopold, V.Chis, A.Parnau, - XXIX European Congress on Molecular Spectroscopy, Opatija, Croatia, 31 August – 5 September, 2008
5. EPR Investigations of Some Cu (II) Complexes With Rhombic Symetry, O. Cozar, L. David, A. Marcu, I. B. Cozar, 16th International Conference on Solid Compounds of Transitions Elements, Dresden, Germany, July 26-31, 2008
6. Spectroscopic and density functional theory investigation of some cardiovascular compounds, I.B. Cozar, L. Szabo, N. Leopold, V. Chis, L. David, National Conference of Biophysics, Cluj-Napoca, Romania, October 1-3, 2009
7. Structural investigation of a new synthesized thiazolidine compound with antimicrobial potential, N. Vedeanu, A. Pirnau, I.B. Cozar, O. Oniga, C. Moldovan, C. M. Lucaciu, Conference of Biophysics, Cluj-Napoca, Romania, October 1-3, 2009
8. Structural Investigation Of A New Antimicrobial Thiazolidine Compound, I. B. Cozar, A. Pirnau, N. Vedeanu, C. Nastasa, 9th International Conference on Processes in Isotopes and Molecules (PIM), Cluj Napoca, Romania, SEP 25-27, 2013
9. Spectroscopic And DFT Investigation Of Benzaldehyde Isonicotino – Hydrazone Compound, I.B. Cozar, A. Pirnau, L. Szabo, N. Vedeanu, C. Nastasa, O. Cozar, 10th International Conference on Processes in Isotopes and Molecules (PIM), Cluj Napoca, Romania, SEP 23-25, 2015
10. Label-Free Detection of Bacteria Using Surface-Enhanced Raman Scattering and Principal Component Analysis, 11th International Conference on Processes in Isotopes and Molecules (PIM), Cluj Napoca, Romania, SEP 27-29, 2017
11. SERS Applications in White Wines Differentiation, I. B. Cozar, S. Cinta-Pinzaru, I. Feher, D.A. Magdas, 8th Recent Advances in Food Analyses, Prague, Czech Republic, November 7-10, 2017
12. SERS Substrate Fabricated By The Thermal Nanostructuring Of A Gold Film On A Glass Support Substrate, R.T. Brăţfălean, I.B. Cozar, C. Nuţ, 12th International Conference on Processes in Isotopes and Molecules (PIM), Cluj Napoca, Romania, SEP 25-27, 2019