

UNIVERSITATEA PETROL-GAZE DIN PLOIESTI

Facultatea Tehnologia Petrolului și Petrochimie

Departamentul Chimie

Conf. Dr. Mihai Sonia

**LISTA
lucrărilor științifice**

A. Teza de doctorat

Combinații complexe cu tioliganzi.

B. Cărți și capitole în cărți publicate în ultimii 10 ani

1. Trambităsu Eva, Octav Pantea, **Sonia Mihai** *Analiza poluantilor*, Ed. UPG, Ploiești, 181 pag, 2007, ISBN 978-973-719-166-3.
2. Octav Pantea, Stelian Neagoe, **Sonia Mihai**, Bogdan Mocanu *Chimie analitica cantitativa. Întrebări și probleme*, Ed. Ilex, Bucuresti, 179 pag, 2009, ISBN 978-973-7928-43-6.

C. Articole indexate ISI/BDI publicate în ultimii 10 ani

1. **Mihai S.**, Cursaru D.L., Matei D., Manta A.M., Somoghi R., Brănoiu G., *Rutile Ru_xTi_{1-x}O₂ nanobelts to enhance visible light activated photocatalytic activity*, *Scientific Reports*, 2019, **9**, 18798 <https://doi.org/10.1038/s41598-019-55446-7>
2. Manta AM., Cursaru DL., **Mihai S.**, *The influence of synthesis conditions on the structural and redox properties of Mn-MCM-41*, *Digest Journal of Nanomaterials and Biostructures*, **2019**, 14, No 3, p. 509-515.
3. Cursaru DL., Giagkas N., Vizireanu S., **Mihai S.**, Matei D., Biță B., Stancu C., Manta A.M., Ramadan I., *Improvement of Antiwear Properties by Coating the Steel Surfaces and by Lubricant Additivation*, *Digest Journal of Nanomaterials and Biostructures*, **2019**, 14, No 4, p. 907-915.
4. **Mihai S.**, Cursaru D.L., Matei D., Dinescu A., Stoica S.D., Vizireanu S., Dinescu G., *Carbon Nanowalls Decorated with Gold Nanoparticles for Surface-Enhanced Raman Spectroscopy*, *Digest Journal of Nanomaterials and Biostructures*, **2018**, 13, No 3, p. 743-749.
5. Cursaru D.L., Nassreddine S., Riachi B., Neagu M., **Mihai S.**, Matei D., Brănoiu G. *Impact of moisture on the corrosion behavior of copper and mild carbon steel in corn biodiesel*, *Corrosion Rev.* 36, 6, p.559-574, **2018**, DOI: <https://doi.org/10.1515/corrrev-2018-0015>
6. Cursaru L. D., Doicin B., **Mihai S.**, *Connection between Co/MCM-48 catalyst synthesis conditions and performances in the steam reforming process through*

- artificial neural network*, Digest Journal of Nanomaterials and Biostructures, 12, No 2, 2017, p. 483-494.
- 7. **Mihai S.**, Cursaru L. D., Ghita D., Dinescu A., *Morpho ierarhic TiO₂ with plasmonic gold decoration for highly active photocatalysis properties*, MaterLett., 162, 2016, p. 222-225, <https://doi.org/10.1016/j.matlet.2015.10.012>
 - 8. **Mihai, S.**, *Synthesis of Gold Nanoparticles Using Schiff Base*, Acta Phys. Pol A, 123, 2013, p. 254-255.
 - 9. **Mihai S.**, Malaiesteanu, M., *Size-depenent Antibacterial of Gold Colloids*, Rev.Chim. (Bucharest), 64, 2013, p.105-107.
 - 10. **Mihai S.**, Bondarev A., Negoiu M., *Complexes of Pt(II) and Pd(II) with Symmetrical Bipodal N, N-bis-antipyrine-N' pyridinethioureas*, Rev.Chim. (Bucharest), 64, 2013, p.191-195.
 - 11. Cursaru D., Vizireanu S., **Mihai S.**, Ghiță D., Stoica, D.S., Dinescu Gh., *Friction and wear properties of carbon nanowalls coatings*, Digest Journal of Nanomaterials and Biostructures, 9, No 3, 2014, p. 1105-1114.
 - 12. Cursaru D., Ghiță D., **Mihai S.**, *Effect of functionalization of single walled carbon nanotubes on antiwear properties of a mineral oil*, Digest Journal of Nanomaterials and Biostructures, 2014, 9, No 4, p. 1379-1388.
 - 13. **S. Mihai**, M. Negoiu, *Synthesis characterization and antitumor activity of platinum (II), palladium (II), gold (III), silver (II), cooper (II), rhodium (III), ruthenium(III) complexes with N-antipirine N' benzoylthiourea*, Rev.Chim. (Bucharest), 63, 2012, p. 697-702.
 - 14. D. Cursaru, **S. Mihai**, *Corrosion behaviour of automotive materials in biodiesel from sunflower oil*, Rev.Chim. (Bucharest), 63, 2012, p.945-948.
 - 15. D. Bombos, R. Ganea, V. Matei, C. Marinescu, A. Bondarev, **S. Mihai**, T. Natu, I. Tamas, *Modified Bentonite for Purification of Dyeing Waste Water*, Rev.Chim. (Bucharest), 65, 2014, p.976-982.
 - 16. A Bondarev, **S Mihai**, O Pantea, S Neagoe, *Use of biopolymers for the removal of metal ion contaminants from water*, Macromolecular Symposia, 303, 2011, p. 78-84.
 - 17. **Sonia Mihai**, Maria Negoiu, Andreea Bondarev, *Synthesis, Characterization and Biological Activity of Some Novel Metan ml Complexes of Schiff Base Derived from p-phenyldiamine and 2-thiophene Carboxaldehyde*, Rev.Chim. (Bucharest), 60, 2009, p.778-782.
 - 18. **Sonia Mihai**, Maria Negoiu, *Synthesis and Characterization of Ni (II), Pt (IV), Pd (II), Co (II), Au (III), Cu (II) Complexes with Mixed Ligands*, Rev.Chim. (Bucharest), 60, 2009, p.222-225.
 - 19. Gheorghe Branoiu, **Sonia Mihai**, Diana Cursaru, *Rietveld Structure Refinement of the Stibnite Crystals from Herja (Romania) using X-ray Powder Diffraction Data*, Rev.Chim. (Bucharest), 66, 2015, p.825-828.
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 - 21. Catalina Calin, Gina Scaeteanu, Octav Pantea, Leonard Ilie, Andreea Bondarev, **Sonia Mihai**, *Influence of dithiocarbamates used for phytosanitary treatments on the*

- microelement contents from vineyard soil in Tohani region of Romania*, Rev.Chim. (Bucharest), 65, 2014, p.497-501.
22. Negoiu M., **Mihai S.**, Neagoe S., Pantea O., *Co(II), Cd(II), Pd(II), Rh(III) and Pt(IV) complex combinations with thiuram*, Rev.Chim. (Bucharest), 58, 2007, p.866-869.
 23. Cursaru D., **Mihai S.**, *Evaluation of thermal stability of biodiesel synthesized from different edible oils by thermogravimetric analysis*, Revista de Chimie, Vol. 64, No. 10, 2013, p. 1156-1159.
 24. Matei D., Cursaru D.L., **Mihai S.**, *Preparation of MCM-48 mesoporous molecular sieve influence of preparation conditions on the structural properties*, Digest Journal of Nanomaterials and Biostructures, 2016, 11, No 1, p. 271-276.
 25. Bondarev A., Pantea O., **Mihai S.**, Calin C., Gheorghe C.G., *Removal of cadmium from aqueous solutions using low cost sorbents*, Revista de Chimie, Vol. 67, No. 4, 2016, p. 728-733.
 26. Cursaru D., Ghiță D., **Mihai S.**, *Effect of functionalization of single walled carbon nanotubes on antiwear properties of a mineral oil*, Digest Journal of Nanomaterials and Biostructures, 2014, 9, No 4, p. 1379-1388.
 27. **Mihai S.**, Dinescu A., Nistor L. C., Ciuparu D., *Facile Synthesis of Gold Nanostructures Using a One-Step Chemical Method*, Adv. Sci. Eng. Med., 6, 2014, p.399-404.
 28. Octav Pantea, Dorin Bombos, Mihaela Bombos, **Sonia Mihai**, Ion Bolocan, *Estimation of Corrosion Action of Emulsified Fuels upon some Metals and Alloys*, Buletinul UPG, Seria Tehnică, Nr. 4/2008.
 29. Eva Trîmbițașu, Octav Pântea, Andreea Bondarev, **Sonia Mihai**, Daniela Popovici, Stelian Neagoe, Dorina Matei, *Aspects Regarding Pollution with Heavy Metals of Soils from Ploiești City*, Buletinul UPG, Seria Tehnică, Nr. 4/2008.
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 31. Roxana Bădulescu, Simona Radu, **Sonia Mihai**, Vasile Dumitrescu, Ion Bolocan, *The Validation of Methods for the Analysis of Some Volatile Organic Compounds by GC-MS*, Buletinul UPG, Seria Tehnică, Nr. 1/2008.
 32. **S.Mihai**, A.Bondarev, O. Pântea, *Microencapsulation of essential oils by using biocompatible polymers*, Buletinul UPG, Seria Tehnică, Nr. 1/2009.
 33. E. Trîmbițașu, O. Pântea, S. Neagoe, A.Bondarev, **S. Mihai**, *Aspects regarding metals corrosion in different electrolites solutions*, Revista de Coroziune, 2009.
 34. E. Trîmbițașu, O. Pântea, A.Bondarev, **S. Mihai**, S. Neagoe, *The urban traffic, a pollution reason in Ploiești City*, Revista de Coroziune, 2009.

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- Selecție cu maximum 20 de lucrări în volume de conferințe

1. **Mihai Sonia**, Cursaru Diana, Dinescu Adrian, Vizireanu Sorin (2014), *Gold Nanoparticles on Carbon Nanowalls for Surface-Enhanced Raman Spectroscopy- 1st International Colloquium Energy and Environmental*

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2. Cursaru, D., **Mihai, S.**, Bogatu, L., Vizireanu, S., (2014), *Friction and wear properties of carbon nanowalls coatings - 1st International Colloquium Energy and Environmental Protection, 20-21.11.2014, Ploiești, România* <http://tppconferinte.upg-ploiesti.ro/>
3. **S. Mihai**, C. Andronescu, A. Dinescu, S. Vizireanu, G. Dinescu, D. Ciuparu, *Gold nanoparticles on carbon nanowalls for surface-enhanced Raman spectroscopy*, Third International Conference on Multifunctional Hybrid and Nanomaterial, Martie 2013, Sorento Italia https://elsevier.conference-services.net/resources/247/3159/pdf/HYMA2013_0406.pdf
4. Cursaru, D., **Mihai, S.**, (2012), *Corrosion behaviors of automotive materials in biodiesel from sunflower oil*, 5th International Mechanical Engineering Forum, 20-22.06.2012, Praga, Cehia <http://www.imef.cz/>
5. **S. Mihai**, O. Pantea, *Assembling Gold Nanoparticles for Surface-Enhanced Raman Spectroscop*, 4th International Conference Nanocon, Brno Cehia, 23-25.10.2012 <http://nanocon2012.tanger.cz/en/view-list-of-papers/953-assembling-gold-nanoparticles-for-surface-enhanced-raman-spectroscopy/>
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7. A. Bondarev, **S. Mihai**, D. Popovici, S. Neagoe, O. Pantea, *Electrochemical Study of the Effect of Radioactive Waste on the Corrosion Behavior of Some Alloys*, ElecNano - 7th ECHEMS, 23-26 May 2011, Paris, France, www.elecnano.univ-paris-diderot.fr, Paris, Franta 2011
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9. A. Bondarev, **S. Mihai**, D. Popovici, S. Neagoe, O. Pantea, *Heavy Metals Adsorption using Biopolymer Microspheres*, Tagung Festkörperanalytik, Viena, 4 -6 July 2011, www.cta.tuwien.ac.at/fka16, Viena, Austria 2011
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12. Calin, G. Vasile, O. Pântea, A. Bondarev, **S. Mihai**, *The influence of dithiocarbamates used for phytosanitary treatments of vineyard on the microelements contents from soil*, 15th International Biodeterioration and Biodegradation Symposium, Viena, 19-24 Sept. 2011, www.biotec.boku.ac.at

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- 15.** S. Mihai, S. Vizireanu, O. Pantea, A. Dinescu, D. Ciuparu, *Synthesis and Characterization of Advanced Materials Based of Nanogold on carbon Nanowall templates*, 10th International Conference on Materials Chemistry (MC10), Manchester United Kingdom 2011
- 16.** S.Mihai, O.Pantea, S.Neagoe, D.Ghita, A.Bondarev, *Synthesis of Gold Nanoparticles with Catalytic Applications*, International Conference on Nanoscience + Technology (ICN+T2012), Paris, 23-27 Iulie 2012
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- 18.** S. Mihai, O. Pantea, *Assembling Gold Nanoparticles for Surface-Enhanced Raman Spectroscopy*, 4th International Conference Nanocon, Brno Cehia 2012, <http://nanocon2013.tanger.cz/files/proceedings/04/reports/953.pdf>
- 19.** A.Bondarev, F. Cuiban, **S. Mihai**, *N-alkylation of some N-β-cyanoethyl-ε-caprolactam derivatives and their surfractant properties*, The 13th Brazilian Meeting on organic synthesis, Sao Petro, Brazilia BMOS, 31 august-4 sept. 2009
- 20.** Sonia Mihai, Andrea Bondarev, *Formulation for microencapsulation of essential oils by using naturally occurring polysaccharides*, Frontiers in polymer science, 7-9iune 2009.
- 21.** M.V. Angelusiu, **Sonia Mihai**, S.F. Barbuceanu, M. Negoiu, S. Neagoe, O. Pantea, *Synthesis and spectroscopic characherization of Cu(II), Ni(II), Co(II), Pd(II), Pt(II) complexes with hydrazone derivates*, The 10thInternational Meeting Inonorganic Chemistry, Palermo, iulie 1-4, 2009, Italia.
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- 25.** Sonia Mihai, Maria Negoiu, *Sinteza și caracterizarea combinațiilor complexe ale Pt(II), Pd(II), Rh(III) și Ru(III) cu derivați de la n-benziltiourea*, Conferința națională de Chimie, Calimanesti Caciulata, Octombrie 2008.
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- 27.** S.Mihai, A. Bondarev, S.Neagoe, O.Pântea, *Preparation, Characterization and Adsorption Properties of Chitosan Microspheres Crosslinked by o-Vanillin for Heavy Metals from Aqueous Solution*, POLYSOLVAT-8, 8th International IUPAC Conference Polymer-Solvent Complexes & Intercalates, 5-8 July 2010, Strasbourg, France, www.ics.u-strasbg.fr
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- 31.** S. Mihai, D. Cursaru, D. Ghiță, A Bondarev, A. Manta, *Low Temperature Oxidation of Methane on Gold Nanoparticles*, 9th International Conference and Expo on Oil and Gas, Rome, Italy, 2018
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Brevete obținute în întreaga activitate

1. D. Bombos, I. Bolocan, D. Popovici, O. Pantea, D. Cristina, J. Traian, A. Bondarev, S. Mihai, G. Bozga, M. Bombos, G. Vasilievici, I. Bolma, E. Zaharia, *Procedeu de obtinere a unui combustibil lichid de focare*, OSIM RO 126668 A2 din 2012.

