

# CURRICULUM VITAE

## INFORMAȚII PERSONALE

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## EXPERIENȚA PROFESIONALĂ

### ACTIVITATE DE EVALUARE ȘI EXPERTIZĂ

Cercetare in domeniul nanomaterialelor avansate: metode de sinteza, metode de caracterizare, testari in vederea aplicabilității materialelor sintetizate. Îmbunătățirea proprietăților materialelor nanostructurate pentru aplicații țintite.

### DOMENII DE COMPETENȚĂ

Sinteza materiale avansate in nanoreactoare, eliberare controlata de principii active, cataliza si fotocataliza pe materiale nanostructurate.

### ACTIVITATEA ȘTIINȚIFICĂ (vezi ANEXE)

#### ARTICOLE PUBLICATE IN REVISTE ISI (inclusiv citari):

1. Maria Alexandroaei, Maria Ignat, Ioan Gabriel Sandu, "**The Removal of the Pb<sup>2+</sup> Ions from Solutions by a Hydroxyapatite Nanomaterial**", REV CHIMIE (BUCHAREST) nr. 10 (2013), pp 1100-1105, IF: **0.538**
2. Feraru, S., Samoila, P., Borhan, A.I., Ignat, M., Iordan, A.R., Palamaru, M.N., „**Synthesis, characterization of double perovskite Ca<sub>2</sub>MSbO<sub>6</sub> (M = Dy, Fe, Cr, Al) materials via sol-gel auto-combustion and their catalytic properties**”, Materials Characterization 84 (2013), pp. 112-119, IF: **1.880**
3. Alexandru Cecal, Maria Ignat , Nicoleta Melniciuc Puica, „**Kinetics of Co(II) and V(IV) adsorption on zeolites**”, **Environmental Engineering and Management Journal** 2013, accepted for publication, IF: **1.435**
4. N. Rezlescu, E. Rezlescu, C. Doroftei, P.D. Popa, M. Ignat, "**Nanostructured lanthanum manganite perovskites in catalyst applications**", Digest Journal of Nanomaterials and Biostructures, 8(2) (2013) 581-587, IF: **1.092**

#### CITATIONS 1:

- 1) Synthesis and characterization of zeolite/Fe<sub>3</sub>O<sub>4</sub> nanocomposite by green quick precipitation method, Jahangirian, H., Shah Ismail, M.H., Jelas Haron, M., Rafiee-Moghaddam, R., Shamel, K., Hosseini, S., Kalantari, K., (...), Soltaninejad, S., *Digest Journal of Nanomaterials and Biostructures* 8 (4) (2013), pp. 1405-1413.
  5. N. Rezlescu, E. Rezlescu, P. D. Popa, C. Doroftei, M. Ignat, „**Nanostructured GdAlO<sub>3</sub> perovskite, a new possible catalyst for combustion of volatile organic compounds**”, *Journal of Materials Science* 48 (12) (2013), pp. 4297-4304, IF: **2.015**
- #### CITATIONS 1:
- 1) Nanocrystalline SrMnO<sub>3</sub> powder as catalyst for hydrocarbon combustion, Doroftei, C., Popa, P.D., Rezlescu, E., Rezlescu, N., *Journal of Alloys and Compounds* 584 (2014), pp. 195-198
  6. I.F. Alexa, C.G. Pastravanu, M. Ignat, E. Popovici, „**A comparative study on long-term MTX controlled release from intercalated nanocomposites for nanomedicine applications**”, *Colloids and Surfaces B: Biointerfaces*, 106 (2013) 135–139, IF: **3.456**
  7. Rezlescu, N., Rezlescu, E., Popa, P.D., Popovici, E., Doroftei, C., Ignat, M., „**Preparation and**

**characterization of spinel-type  $MeFe_2O_4$  (Me = Cu, Cd, Ni and Zn) for catalyst applications”, *Materials Chemistry and Physics* 137(2013), 922-927, IF: 2.234**

**CITATIONS 4:**

- 1) Nanocrystalline  $SrMnO_3$  powder as catalyst for hydrocarbon combustion, Doroftei, C., Popa, P.D., Rezlescu, E., Rezlescu, N., *Journal of Alloys and Compounds* 584 (2014), pp. 195-198.
  - 2) Synthesis, structural characterization, and magnetic property of nanostructured ferrite spinel oxides ( $AFe_2O_4$ , A = Co, Ni and Zn), Luadthong, C., Itthibenchapong, V., Viriya-Empikul, N., Faungnawakij, K., Pavasant, P., Tanthapanichakoon, W., *Materials Chemistry and Physics* 143 (1) (2013), pp. 203-208.
  - 3) Preparation and catalytic activity in ethanol combustion reaction of cobalt-iron spinel catalysts, Hammiche-Bellal, Y., Benadda, A., Meddour-Boukhobza, L., Barama, S., Djadoun, A., Barama, A., *Catalysis Communications* 42 (2013), pp. 62-67.
  - 4) Nanostructured lanthanum manganite perovskites in catalyst applications, Rezlescu, N., Rezlescu, E., Doroftei, C., Popa, P.D., Ignat, M., *Digest Journal of Nanomaterials and Biostructures* 8 (2) (2013), pp. 581-587
8. Rezlescu, N., Rezlescu, E., Popa, P.D., Popovici, E., Doroftei, C., Ignat, M., Barbinta, A.C., **„Morphological and structural aspects of some ferrosinell nanopowders for catalyst applications”, *Digest Journal of Nanomaterials and Biostructures* 7(4) (2012), 1709-1717, IF: 1.200**
9. A. Cecal, D. Ganju, M. Ignat, N. Melniciuc-Puica, P. Samoila, **“Recovery of  $Fe^{3+}$ ,  $Ti^{4+}$  and  $Ni^{2+}$  ions from the resulted sludges in uranium ores processing, by means of 4 zeolites”, *Environmental Engineering and Management Journal* 2012, accepted for publication, IF: 1.435.**
10. Iuliana F. Alexa, Maria Ignat, Roxana Florentina Popovici, Daniel Timpu, Eveline Popovici, **„In vitro controlled release of antihypertensive drugs intercalated into unmodified SBA-15 and MgO modified SBA-15 matrices”, *International Journal of Pharmaceutics*, Volume 436, Issues 1–2, 15 (2012) 111–119, IF: 3.350.**

**CITATIONS 1:**

- 1) A comparative study on long-term MTX controlled release from intercalated nanocomposites for nanomedicine application, I.F. Alexa, C.G. Pastravanu, M. Ignat, E. Popovici *Colloids and Surfaces B: Biointerfaces*, 106 (2013) 135– 139.
11. Maria Ignat, Cristina Coromelci, Evelini Popovici, **“ $TiO_2$ -coated Ordered Mesoporous Carbon for Phenol Photodegradation”, *Revista de Chimie*, 63, nr. 4, 2012, pp. 358-361, IF: 0,693**

**CITATIONS 1:**

- 1) Influence of working parameters on some properties of  $TiO_2$  Thin layers deposited through sputtering method, Vasilache, T., Stamate, M., Nedeff, V., Lazar, G., Vasilache, V., *Revista de Chimie* 63 (11) 2012, pp. 1116-1119
12. Ion I. Geru, G. N. Gubceac, Maria I. Ignat, and Eveline N. Popovici, **“Synthesis and Physico-Chemical Properties of Mesoporous Carbon Nanotubes”, *Journal of Nanoelectronics and Optoelectronics*, Vol. 6, 484-490, 2011, IF: 0.9, SRI: 0.79236**

**CITATIONS 1:**

- 1) A Special Issue on Physical Properties and Applications of Nanostructures, Denis L. Nika and Evghenii P. Pokatilov, *J. Nanoelectron. Optoelectron.* 6, 379-380 (2011)
13. Maria Ignat, Maria Alexandroaei, Neculai Cătălin Lungu, **“The Removal of the  $Zn^{2+}$  Ions from Groundwater using Hydroxiapatite Nanoparticles”, *Revista de Chimie*, 62, No.5, 2011. IF: 0.693**

**CITATIONS 3:**

- 1) Spatial distribution of the trace elements zinc, strontium and lead in human bone tissue, Pemmer, B., Roschger, A., Wastl, A., Hofstaetter, J.G., Wobraschek, P., Simon, R., Thaler, H.W., (...), Strelci, C., *Bone* 57 (1) (2013), pp. 184-193.

- 2) Fabrication and Pb(II) adsorptive properties of magnetic hydroxyapatite, Yang, H., Zhang, H., Huang, C., Huang, R., Li, L., *Cailliao Yanjiu Xuebao/Chinese Journal of Materials Research* 26 (6) (2012), pp. 621-626.
  - 3) Synthesis and characterization of nano hydroxyapatite used for immobilizing heavy metals, Saplontai, M., Balc, N., Saplontai, V., Cojocaru, I., Toth, R., Moldovan, M., *Revista de Chimie* 63 (12) (2012), pp. 1228-1230
14. Maria Ignat, Evelini Popovici “**Synthesis of Mesoporous Carbon Materials via Nanocasting Route Using glycerol compare to Sucrose as Carbon Sources**”, *Revue Roumaine de Chimie*, 56 (10-11), pp. 947-952, 2011, IF: **0.311**  
**CITATIONS 2:**
- 1) Fabrication and Pb(II) adsorptive properties of magnetic hydroxyapatite, Yang, H., Zhang, H., Huang, C., Huang, R., Li, L., *Cailliao Yanjiu Xuebao/Chinese Journal of Materials Research* 26 (6) **2012**, pp. 621-626.
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15. I. F. Alexa, R. F. Popovici, M. Ignat, E. Popovici, V. A. Voicu, “**Non-toxic nanocomposite containing captopril intercalated into green inorganic carrier**”, *Digest Journal of Nanomaterials and Biostructures* Vol. 6 (3) 2011, p. 1091-1101, IF: **2.079**  
**CITATIONS 4:**
- 1) Layered Double Hydroxides Nanohybrid Intercalation with Folic Acid Used as Delivery System and their Controlled Release Properties, Bashi, A.M., Haddawi, S.M., Mezaal, M.A., *Arabian Journal for Science and Engineering* 38 (7) (**2013**), pp. 1663-1680.
  - 2) *A comparative study on long-term MTX controlled release from intercalated nanocomposites for nanomedicine application*, I.F. Alexa, C.G. Pastravanu, M. Ignat, E. Popovici, *Colloids and Surfaces B: Biointerfaces*, 106 (**2013**) 135– 139.
  - 3) *In vitro controlled release of antihypertensive drugs intercalated into unmodified SBA-15 and MgO modified SBA-15 matrices*, Iuliana F. Alexa, Maria Ignat, Roxana Florentina Popovici, Daniel Timpu, Eveline Popovici, *International Journal of Pharmaceutics*, Volume 436, Issues 1–2, 15 (**2012**) 111–119.
  - 4) *Pharmacokinetics study on mesoporous silica-captopril controlled release systems*, Popovici, R.F., Alexa, I.F., Novac, O., Vranceanu, N., Popovici, E., Lupusoru, C.E., Voicu, V.A., *Digest Journal of Nanomaterials and Biostructures* 6 (4) **2011**, pp. 1619-1630
16. M. Ignat, C.J. Van Oers, J. Vernimmen, M. Mertens, S. Potgieter-Vermaak, V. Meynen, E. Popovici, P. Cool, „**Textural property tuning of ordered mesoporous carbon obtained by glycerol conversion using SBA-15 silica as template**”, *CARBON*, 48, 5 (2010) 1609-1618, IF: **4.893**, SRI: **2.933**  
**CITATIONS: 20**
- 1) Soft-templated synthesis of mesoporous carbon nanospheres and hollow carbon nanofibers, Cheng, Y., Li, T., Fang, C., Zhang, M., Liu, X., Yu, R., Hu, J., **2013**, *Applied Surface Science* 282 , pp. 862-869.
  - 2) Characterization of mesoporous carbon prepared from date stems by H<sub>3</sub>PO<sub>4</sub> chemical activation, Hadoun, H., Sadaoui, Z., Souami, N., Sahel, D., Toumert, I., **2013**, *Applied Surface Science* 280 , pp. 1-7.
  - 3) Nitrogen and sulfur co-doped ordered mesoporous carbon with enhanced electrochemical capacitance performance, Zhang, D., Hao, Y., Zheng, L., Ma, Y., Feng, H., Luo, H., **2013**, *Journal of Materials Chemistry A1* (26) , pp. 7584-7591.
  - 4) A comparative study on long-term MTX controlled release from intercalated nanocomposites for nanomedicine applications, Alexa, I.F., Pastravanu, C.G., Ignat, M., Popovici, E., **2013**, *Colloids and Surfaces B: Biointerfaces* 106 , pp. 135-139.
  - 5) Synthesis, characterization and growth mechanism of mesoporous hollow carbon nanospheres by catalytic carbonization of polystyrene, Gong, J., Liu, J., Chen, X., Wen, X., Jiang, Z., Mijowska, E., Wang, Y., Tang, T., **2013**, *Microporous and Mesoporous Materials* 176 , pp. 31-40.
  - 6) Nanocasting of hierarchical nanostructured porous carbon in molecular dynamics simulation, Chae, K., Shi, Y., Huang, L., **2013**, *Journal of*

- Materials Chemistry A* 1 (12) , pp. 3886-3894.
- 7) Nanoporous carbon-templated silica nanoparticles: Preparation, effect of different carbon precursors, and their hydrogen storage adsorption, Attia, N.F., Lee, S.M., Kim, H.J., Geckeler, K.E., **2013**, *Microporous and Mesoporous Materials* 173 , pp. 139-146.
  - 8) Importance of the  $\alpha$ -plot method in the characterization of nanoporous materials, Villarroel-Rocha, J., Barrera, D., Blanco, A., Jalil, M., Sapag, K., **2013**, *Adsorption Science and Technology* 31 (2-3) , pp. 165-183.
  - 9) Synthesis of magnetic mesoporous carbon and its application for adsorption of dibenzothiophene, Farzin Nejad, N., Shams, E., Amini, M.K., Bennett, J.C., **2013**, *Fuel Processing Technology* 106 , pp. 376-384.
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  - 11) Carbon black texture evolution during catalytic methane decomposition, Kameya, Y., Hanamura, K., **2012**, *Carbon* 50 (10) , pp. 3503-3512.
  - 12) Preparation and electrochemical performance of polymer-derived SiCN-graphite composite as anode material for lithium ion batteries, Feng, Y., Feng, N.-N., Du, G.-X., **2012**, *International Journal of Electrochemical Science* 7 (4) , pp. 3135-3140.
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  - 14) Synthesis and physico-chemical properties of mesoporous carbon nanotubes, Geru, I.I., Gubceac, G.N., Ignat, M.I., Popovici, E.N., **2011**, *Journal of Nanoelectronics and Optoelectronics* 6 (4) , pp. 484-490.
  - 15) Preparation and electrochemical performance of SiCN-CNTs composite anode material for lithium ion batteries, Feng, Y., Du, G.-X., Zhao, X.-J., Yang, E.-C., **2011**, *Journal of Applied Electrochemistry* 41 (8) , pp. 999-1002.
  - 16) Conditions and features of matrix and bulk carbonization of the organic precursors, Lysenko, N.D., Yaremov, P.S., Ilyin, V.G., Ovcharova, M.V., **2011**, *Journal of Materials Science* 46 (13) , pp. 4465-4470.
  - 17) One-pot synthesis of carbonaceous monolith with surface sulfonic groups and its carbonization/activation, Zhang, W., Tao, H., Zhang, B., Ren, J., Lu, G., Wang, Y., **2011**, *Carbon* 49 (6) , pp. 1811-1820.
  - 18) Direct synthesis of flat cake-type ordered mesoporous carbon in a double surfactant system of P123/CTAB, Wang, Y., Song, H., Zhang, H., Liao, L., Liu, N., Chen, X., **2011**, *Journal of Materials Chemistry* 21 (15) , pp. 5576-5579.
  - 19) Mesoporous carbon pipes-suitable materials for photocatalytic supports, Ignat, M., Pastravanu, C., Popovici, E., **2010**, *Proceedings of the International Semiconductor Conference, CAS2* , art. no. 5650615 , pp. 379-382.
  - 20) Biomolecules adsorption onto ordered mesoporous carbon, Ignat, M., Alexa, I., Popovici, E., **2010**, *European Cells and Materials* 20 (SUPPL.3) , pp. 119
17. E. Dvininov, M. Ignat, P. Barvinschi, M. A. Smithers, E. Popovici **"New SnO<sub>2</sub>/MgAl-layered double hydroxide composites as photocatalysts for cationic dyes bleaching"**, *Journal of Hazardous Materials* 177 (2010) 150–158, IF: **4.144**.

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- 1) *Ti-based layered double hydroxides: Efficient photocatalysts for azo dyes degradation under visible light*, Xia, S.-J., Liu, F.-X., Ni, Z.-M., Shi, W., Xue, J.-L., Qian, P.-P., **2014**, *Applied Catalysis B: Environmental* 144 , pp. 570-579.
- 2) *Multilayer films of layered double hydroxide/polyaniline and their ammonia sensing behavior*, Xu, D.-M., Guan, M.-Y., Xu, Q.-H., Guo, Y., **2013**, *Journal of Hazardous Materials* 262 , pp. 64-70.
- 3) *Sol-gel synthesis of SnO<sub>2</sub>-MgO nanoparticles and their photocatalytic activity towards methylene blue degradation*, Bayal, N., Jeevanandam, P., **2013**, *Materials Research Bulletin* 48 (10) , pp. 3790-3799.
- 4) *Polymer-inorganic supramolecular nano hybrids for red, white, green, and blue applications*, Park, D.-H., Hwang, S.-J., Oh, J.-

- M., Yang, J.-H., Choy, J.-H., **2013**, *Progress in Polymer Science* 38 (10-11) , pp. 1442-1486.
- 5) *Synthesis, characterization and photocatalytic activity of mixed oxides derived from ZnAlTi ternary layered double hydroxides*, Sahu, R.K., Mohanta, B.S., Das, N.N., **2013**, *Journal of Physics and Chemistry of Solids* 74 (9) , pp. 1263-1270.
  - 6) *Layered double hydroxides as efficient photocatalysts for visible-light degradation of Rhodamine B*, Xia, S.-J., Liu, F.-X., Ni, Z.-M., Xue, J.-L., Qian, P.-P., **2013**, *Journal of Colloid and Interface Science* 405 , pp. 195-200.
  - 7) *Amino acid-assisted synthesis of superparamagnetic CoFe<sub>2</sub>O<sub>4</sub> nanostructures for the selective adsorption of organic dyes*, Dong, M., Lin, Q., Chen, D., Fu, X., Wang, M., Wu, Q., Chen, X., Li, S., **2013**, *RSC Advances* 3 (29) , pp. 11628-11633.
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  - 9) *Effects of catalyst characters on the photocatalytic activity and process of NiO nanoparticles in the degradation of methylene blue*, Wan, X., Yuan, M., Tie, S.-L., Lan, S., **2013**, *Applied Surface Science* 277 , pp. 40-46.
  - 10) *Preparation of anionic clay-birnessite manganese oxide composites by interlayer oxidation of oxalate ions by permanganate*, Arulraj, J., Rajamathi, M., **2013**, *Journal of Solid State Chemistry* 198 , pp. 303-307.
  - 11) *Mixed metal oxide nanocomposites derived from layered double hydroxides as photocatalysts for C.I. Basic Blue 3 degradation under UV light*, Rezvani, Z., Sarkarat, M., Khataee, A.R., Nejati, K., **2012**, *Crystal Research and Technology* 47 (11) , pp. 1172-1184.
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  - 13) *Intercalation of Fe(III) complexes into layered double hydroxides: Synthesis and structural preservation*, Huang, Z., Wu, P., Zhang, X., Wang, X., Zhu, N., Wu, J., Li, P., **2012**, *Applied Clay Science* 65-66 , pp. 87-94.
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  - 16) *Hydrothermal synthesis and characterization of graphene/self-assembled SnO<sub>2</sub> hybrid*, Liu, H., Huang, J., Li, X., Liu, J., Zhang, Y., Du, K., **2012**, *Physica E: Low-Dimensional Systems and Nanostructures* 44 (9) , pp. 1931-1935.
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  - 18) *Adsorption applications of acid blue 7 on Mg/Al layered double oxides and mechanism study*, Zhu, H., Ni, Z., Xue, J., **2012**, *Acta Chimica Sinica* 70 (17) , pp. 1798-1804.
  - 19) *Adsorption properties of dye onto Mg/Al-CO<sub>3</sub> layered double hydroxide*, Zhang, L., Wei, D., **2012**, *Advanced Materials Research* 455-456 , pp. 677-682.
  - 20) *Recent progress in the development of carbonate-intercalated Zn/Cr LDH as a novel photocatalyst for hydrogen evolution aimed at the utilization of solar light*, Parida, K., Mohapatra, L., **2012**, *Dalton Transactions* 41 (4) , pp. 1173-1178.
  - 21) *Removal of C. I. Reactive Red 2 from aqueous solution by Ni-Al layered double hydroxide*, Zhang, L., **2012**, *Applied Mechanics and Materials* 148-149 , pp. 1276-1279.
  - 22) *Carbonate intercalated Zn/Fe layered double hydroxide: A novel photocatalyst for the enhanced photo degradation of azo dyes*, Parida, K.M., Mohapatra, L., **2012**, *Chemical Engineering Journal* 179 , pp. 131-139.
  - 23) *Photodegradation of 2,4-D over PdO/Al<sub>2</sub>O<sub>3</sub>-Nd<sub>2</sub>O<sub>3</sub> photocatalysts*

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- 24) *High yield synthesis of novel boron nitride submicro-boxes and their photocatalytic application under visible light irradiation*, Wang, M., Li, M., Xu, L., Wang, L., Ju, Z., Li, G., Qian, Y., **2011**, *Catalysis Science and Technology* 1 (7), pp. 1159-1165.
  - 25) *Adsorption of dye from aqueous solution by Zn-Al calcined layered double hydroxide*, Zhang, L., Chen, Y., **2011**, *Advanced Materials Research* 287-290, pp. 390-393.
  - 26) *Removal of C. I. Reactive Red 2 from aqueous solutions using Mg-Fe layered double hydroxide*, Zhang, L., Chen, Y., **2011**, *2011 International Conference on Consumer Electronics, Communications and Networks, CECNet 2011 - Proceedings*, art. no. 5769316, pp. 4296-4299.
  - 27) *Synthesis of an N, N -Bis(phosphonomethyl)glycine anion-intercalated layered double hydroxide and its selective infrared absorption effect in low density polyethylene films for use in agriculture*, Wang, L., Xu, X., Evans, D.G., Li, D., **2010**, *Industrial and Engineering Chemistry Research* 49 (11), pp. 5339-5346.
18. M. Ignat, I. Alexa, E. Popovici, **"Biomolecules Adsorption onto Ordered Mesoporous Carbon"**, *European Cells and Materials*, 20, supp. 3 (2010) 119, IF: 5.378

#### ARTICOLE PUBLICATE IN CARTI IN EDITURI INTERNAZIONALE:

1. Maria Ignat, Aurica Farcas, Aurelia Vasile, Eveline Popovici **"Calixarene-modified multi-wall carbon nanotubes"**, *Studies in Surface Science and Catalysis*, 174, 1 (2008) 389-392, ISSN: 01672991.

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- ✓ Electrochemical behavior of propranolol hydrochloride in neutral solution on calixarene/multi-walled carbon nanotubes modified glassy carbon electrode, Kun, Z., Shuai, Y., Dongmei, T., Yuyang, Z., *Journal of Electroanalytical Chemistry* 709 (2013), pp. 99-105.
2. Maria Ignat, Cristina Păstravanu, Evelini Popovici, **"Mesoporous Carbon Pipes – Suitable Materials for Photocatalytic Supports"**, *Proceedings of the International Semiconductor Conference, CAS 2*, art. no. 5650615, pp. 379-382.
  3. Maria Ignat and Evelini Popovici, **"Layered Porous Carbons Based on Montmorillonitic Structure"** în cartea *"Synthesis and Characterization of Nanostructured Materials"*, ©Macmillian Publishers India Limited, Advanced Research Series, eds. V. Rajendran, B. Hillbrands, K. Saminathan, K.E. Geckeler, 411-416 (2010), ISBN: 0230-33193-9.
  4. Roxana Popovici, Maria Ignat, Aurica Farcas, Evelini Popovici, Victor A. Voicu, **"New Design of Controlled Captopril-Release System Based on Captopril/Calix[8]arene Inclusion Complex"** în cartea *"Processes and Characterization of advanced Nanosstructured Materials"*, ©Macmillian Publishers India Limited, Advanced Research Series, eds. V. Rajendran, B. Hillbrands, N. Meenakshisundaram, K.E. Geckeler, 159-164 (2010), ISBN: 0230-33199-8.
  5. Alexa, Iuliana Florentina; Ignat, Maria; Sunel, Valeriu; Popovici, Evelini, **"In vitro controlled - release of nanobiomaterials based on captopril"** – Proceedings of the 5<sup>th</sup> International FEZA Conference, 969-970 (2011), ISBN: 978-84-8363-722-7 (electronic), Ref. editorial: 6029
- Rezlescu, N., Rezlescu, E., Doroftei, C., Popa, P.D., Ignat, M., **"Semiconducting spinel ferrite powders prepared by self-combustion method for catalyst applications"**, *Proceedings of the International Semiconductor Conference, CAS 2* (2012), art. no. 6400782, pp. 287-290.

#### CARTI PUBLICATE:

IV<sup>th</sup> Vol.: **SPECIAL NANOSTRUCTURED MATERIALS: NANOTUBES**, Eveline Popovici, Maria Ignat Rudei, Ed. DEMIURG, 2009, ISBN: 978-973-152-164-0, 233 pages, collection: **ADVANCED NANOSTRUCTURED MATERIALS. Present and future** (ISBN: 978-973-152-001-8)

#### PARTICIPARI LA CONFERINTE INTERNAZIONALE:

1. Cristina Giorgiana Pastravanu, Maria Ignat\*, Evelini Popovici, **Nitrogen-doped titania: hydrothermal vs. Ultrasound synthesis**, 5th International Symposium Advanced Micro- and Mesoporous Materials, September 6-9 2013, Golden Sands, Bulgaria.
2. Alexandroaiei M., Ignat M., **TEMPLATE ASSISTED SYNTHESIS OF HYDROXYAPATITE FOR HEAVY METALS REMOVAL FROM WASTEWATER**, Conferința Internațională de Științe Aplicate. Chimie și Inginerie Chimică – CISA 2013, 15-18 mai 2013, Bacău, ROMANIA
3. Ignat M., Tomoiaga A.M., Vasile A., **MESOPOROUS SILICA/BISMUTH OXIDE NANOCOMPOSITE FOR WASTEWATER TREATMENT**, Conferința Internațională de Științe

- Aplicate. Chimie și Inginerie Chimică – CISA 2013, 15-18 mai 2013, Bacău, ROMANIA
4. **“Semiconducting spinel ferrite powders prepared by self-combustion method for catalyst applications”**, N. Rezlescu, E. Rezlescu, C. Doroftei, P.D. Popa, M. Ignat, 34<sup>th</sup> International Semiconductor Conference CAS 2012, 15-17 Octombrie, Sinaia, Romania
  5. **“Mesoporous Carbon Pipes – Suitable Materials for Photocatalytic Supports”** Maria Ignat, Cristina Păstravanu, Evelini Popovici – 33<sup>rd</sup> International Semiconductor Conference CAS 2010, 11-13 Octombrie, Sinaia, Romania
  6. **“Layered Porous Carbons Based on Montmorillonitic Structure”** Maria Ignat and Evelini Popovici - International Conference on Nanomaterials and nanotechnology NANO-2010, 13-16 December 2010, KRS Campus, Tiruchengode – Coimbatore, India.
  7. **“New Design of Controlled Captopril-Release System Based on Captopril/Calix[8]arene Inclusion Complex”** Roxana Popovici, Maria Ignat, Aurica Farcas, Evelini Popovici, Victor A. Voicu - International Conference on Nanomaterials and nanotechnology NANO-2010, 13-16 December 2010, KRS Campus, Tiruchengode – Coimbatore, India.
  8. **“Photocatalytic performance of some nanocomposites based on new romanian clinoptilolite tuffs from Chilioara area”** M. Ignat, G.D. Mihai, C. Calb, M. Alexandroaiei, N. Bilba, E. Popovici - ZEOLITE 2010 – The 8<sup>th</sup> International Conference on the Occurrence, Properties and Utilisation of Natural Zeolites, Sofia, Bulgaria, 10-18.07.2010.
  9. Maria Ignat, Alina Maria Tomoiaga, Aurelia Vasile, **Nanosized Bi(III)oxide/mesoporous silica photocatalyst for the wastewater treatment**, Third International Conference on Multifunctional, Hybrid and Nanomaterials, 3-7 March 2013, Sorrento (near Naples), Italy
  10. **“Exchange Properties of Templated Hydroxyapatite Compare to a Commercial Product”** Maria Alexandroaiei, Maria Ignat, *International Conference of Applied Sciences, Chemistry and Chemical Engineering – CISA 2012, Bacău, Romania, April 24<sup>th</sup>-27<sup>th</sup> 2012.*
  11. **“Mesoporous Carbon With High Sorption Property As Excellent Candidate For Wastewater Decontamination”**, Ignat Maria, Coromelci Cristina Giorgiana, Popovici Eveline, The V International Conference-Symposium ECOLOGICAL CHEMISTRY 2012, March 2-3, 2012, Academy of Sciences of Moldova (ASM)
  12. **“Preliminary Study On Recycling Wasted Degussa Photocatalysts In The Degradation Of Rose Bengal From Textile Wastwaters”**, Pastravanu Cristina, Cretescu Igor, Ignat Maria, Popovici Eveline, The V International Conference-Symposium ECOLOGICAL CHEMISTRY 2012, March 2-3, 2012, Academy of Sciences of Moldova (ASM)
  13. **“Preparation and Characterization of N-doped TiO<sub>2</sub> with Enhanced Photocatalytic Activity”** C. Păstrăvanu, M. Ignat, E. Popovici, I. Cretescu - INTERNATIONAL CONFERENCE on Nanotechnologies and Biomedical Engineering, German-Moldovan Workshop, July 7-8, 2011, Chișinău - Republic of Moldova
  14. **“In vitro controlled - release of nanobiomaterials based on captopril”** Alexa, Iuliana Florentina; Ignat, Maria; Sunel, Valeriu; Popovici, Evelini – 5<sup>th</sup> International FEZA Conference, 3<sup>rd</sup> - 7<sup>th</sup> July, 2011, Valencia – Spania
  15. **“Photoactive Characteristics of Nanosized ZnO/SnO<sub>2</sub> Systems”**, Maria Ignat, Diana Tanasa, Doina Lutic, Eveline Popovici - 1<sup>st</sup> International Workshop of the European Nanostructured Materials Institute of Excellence (ENMIX) “Nanostructured materials for sorption, separation and catalysis”, 4-5 Octombrie, 2010, Antwerpen – Belgia
  16. **“Pt-doped Mesoporous Semiconductive Oxides for Gas Sensing”**, Doina Lutic, Maria Ignat, Gina-Dumitrita Mihai, Elena-Mihaela Seftel, Eveline Popovici, Robert Bjorklund and Anita Lloyd Spetz - 1<sup>st</sup> International Workshop of the European Nanostructured Materials Institute of Excellence (ENMIX) “Nanostructured materials for sorption, separation and catalysis”, 4-5 Octombrie, 2010, Antwerpen – Belgia
  17. **“Biomolecules Adsorption onto Ordered Mesoporous Carbon”** M. Ignat, I. Alexa, E. Popovici - Third International NanoBio Conference 2010, August 24-27, ETH Zurich, Switzerland
  18. **“Comparative study of some mesoporous nano-vectors for controlled captopril delivery”** I.F. Alexa, R. Popovici, M. Ignat, E.M. Seftel, E. Popovici, V. Voicu- Third International NanoBio Conference 2010, August 24-27, ETH Zurich, Switzerland
  19. **“Synthesis of Mesoporous Carbon Materials via Nanocasting Route Using glycerol compare to Sucrose as Carbon Sources”** Maria Ignat, Evelini Popovici - RomPhysChem 14 – International Conference of Physical Chemistry, 2-4 Iunie, 2010, Academia Română, București – Romania
  20. **“Preparation and characterization of mesoporous SBA-15 supported TiO<sub>2</sub>/SnO<sub>2</sub> photocatalysts”** G.D. Mihai, E.M. Seftel, M. Ignat, D. Timpu, N. Bilba, E. Popovici - RomPhysChem 14 – International Conference of Physical Chemistry, 2-4 Iunie, 2010, Academia Română, București – Romania
  21. **“Mesoporous carbon obtained from different glycerol loadings by a templating method”**, Ignat M., Mertens M., Popovici E., Cool P., Vansant E.F. - EUROACAT IX Congress, 30 August - 4 Septembrie, 2009, Salamanca – Spania

22. **“Calixarene-modified multi-wall carbon nanotubes”** Maria Ignat, Aurica Farcas, Aurelia Vasile, Eveline Popovici - Zeolites and related materials: Trends, targets and challenges, Proceedings of the 4<sup>th</sup> International FEZA Conference, 2-6 Septembrie, 2008, Paris – Franța

**Citări CONFORM BAZEI DE DATE SCOPUS: 67.**

**Indice Hirsh = 4**

**REFERENT ȘTIINȚIFIC:**

1. Journal of Colloid and Interface Science
2. Drug Delivery

**DIRECTOR / RESPONSABIL GRANTURI DE CERCETARE / DEZVOLTARE:**

- cu finanțare internă:
  - 1) 01.05.2013-30.04.2015, Proiect PN-II-RU-PD-2012-3-0357, finanțat CNCS – UEFISCDI;
- cu finanțare externă:
  - 1) 01.2012 – 12.2012, Grant “Design of nanostructured carbon materials for waste water remediation processes” Investigations of Nano systems and Novel Materials by Neutron Scattering Methods, nr of theme 04-4.1069.2009/2013 within IUCN, GRANT no 17/3901-4-09
  - 2) 01.2013 – 12.2013, Grant “Synthesis and structure of nanooxides used for degradation of organics from waste waters”, Protocol no. 4178-4-2011/2013, Topic No. 04-4-1069-2009/2014, IUCN-DUBNA

**EXPERIENȚĂ DE LUCRU ÎN CERCETARE ȘI INSTRUIRE**

**COLABORATOR ÎN GRANTURI DE CERCETARE**

1. 24.05.2007 – 28.02.2008, Member in CEEX No.1/S1/2005 Project, MATNANTECH, Al. I. Cuza University of Iasi, Romania.
2. 1.03.2008 – 31.06.2009, Research stage in Concerted Research Project sponsored by the Special Fund for Research at University of Antwerp and the Inside-Pores project (EU-FP6 NoE), Antwerpen University.
3. 1.10.2009 – 20.12.2009, Member in SootSens I – “Soot Sensors for a Healthy Environment” – ERA-NET Project MNT7/011/2008, Al. I. Cuza University of Iasi, Romania.
4. 1.07.2010 – 31.12.2010, Member in SootSens II – “Soot Sensors for a Healthy Environment” – ERA-NET Project MNT 7-028/2010, Al. I. Cuza University of Iasi, Romania.
5. 1.02.2011 – 1.02.2012, Member in „Studii Privind Entraparea Enoxilului în Matrici Poroase în Scopul Îmbunătățirii Activității Antioxidante” Project, 1/30.01.2011, Al. I. Cuza University of Iasi, Romania – AȘM Chișinău, Moldova.
6. 01.2011 – 12.2011, Member in „Structura materialelor carbonice funcționalizate endohedral cu oxizi metalici semiconductori. Metode de sinteza inovative.” Project, 3901-4-09/11, 04-4-1069-2009/2011
7. 15.11.2011 - 5.10.2014, PN-II-ID-PCE-2011-3-0453 „NEW NANOSCTRUCTURED OXIDE MATERIALS, FERRITES AND PEROVSKITES, FOR THE CATALYTIC COMBUSTION OF SOME GASES IN LOW CONCENTRATIONS”, program IDEAS
8. 01.2012 – 12.2012, Member in “Efficient photocatalytic degradation of organics from waste waters. Investigations of Nano systems and Novel Materials by Neutron Scattering Methods” Projects, nr of theme 04-4.1069.2009/2013 within IUCN, GRANT no 19/3901-4-09
9. 01.04.2012 – 30.09.2012, Rețea transnațională de management integrat al cercetării postdoctorale în domeniul Comunicarea științei. Construcție instituțională (școală postdoctorală) și program de burse (CommScie) POSDRU/89/1.5/S/63663
10. 01.2013 – 12.2013, Member in “Efficient photocatalytic degradation of organics from waste waters using nanosized oxides designed with micro and mesoporous materials”, Protocol number 4178-4-2011/2013, Topic No. 04-4-1069-2009/2014, within IUCN, Romania – JINR-Dubna
11. 01.02.2012 – 31.12.2013, Member in “Strengthening the Romanian research capacity

in Multifunctional Polymeric Materials" Project, Call: FP7-REGPOT-2010-1, Grant Agreement no: 264115

SPECIALIZĂRI  
POSTUNIVERSITARE

2012 - asistent universitar, prin concurs, la Universitatea „Alexandru Ioan Cuza” din Iași, Facultatea de Chimie;

2008 – 2009 (18 luni), bursa de cercetare doctorat la Universitatea Antwerpen, Belgia

2012 (6 luni), bursa de cercetare postdoctorala Universitatea “Al.I. Cuza”, Iasi, Romania

EDUCAȚIE

2011 doctorat în Chimie, Specialitatea Chimie

2003 iunie, examen de licența la Facultatea de Chimie, Universitatea “Al.I.cuza”;

2000 iunie, examen de bacalaureat, Liceul cu profil Real, Chisinau, R. Moldova;

1998: Școala primară și gimnazială; s. Pepeni, r-nul Singerei, R. Moldova.

MEMBRU ÎN SOCIETĂȚI  
ȘTIINȚIFICE

Membru al Societatii Romane de Chimie din 2011

CUNOȘTINȚE UTILIZARE  
COMPUTERE

Operare bună PC (Microsoft Office Word; Microsoft Office Power Point; Microsoft Office Excel; Origin, Internet (Explorer, Mozilla, Opera), Chem draw, Isis draw), operare specială aparate (UVProbe, MultiWin, Sasview, SAXS, AspectCS, NovaWin, SGI, QuadraWin.....). ș.a.

LIMBI STRĂINE  
CUNOSCUTE

Engleză  
Franceză  
Rusă

Înțelegere		Vorbire			Scriere	
Ascultare	Citire	Participare la conversație		Discurs oral	Exprimare scrisă	
avansat	avansat		avansat		avansat	avansat
avansat	avansat		intermediar		intermediar	avansat
avansat	avansat		avansat		avansat	avansat

Iași  
14.12. 2013