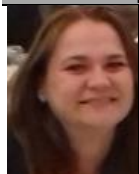


## Lista de publicații:



### Zagrai Mioara

Institutul Național de Cercetare-Dezvoltare pentru Tehnologii Izotopice și Moleculare, INCDTIM, Cluj-Napoca, Centru de Cercetare pentru Tehnologii Avansate și Energii Alternative – CETATEA.

**Articole științifice publicate în reviste cotate ISI: 17**

**Articole științifice publicate în volumul unor conferințe: 4**

**Comunicări științifice la conferințe naționale și internaționale: 53**

**Brevete: 2**

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## I. TEZA DE DOCTORAT în domeniul Ingineriei Mediului (2018)

Titlul tezei de doctorat: "Sisteme oxidice vitroase cu aplicații în protecția mediului",  
conducător de doctorat Prof.dr.chim Elena Maria PICĂ.

## II. Articole științifice publicate în reviste cotate ISI

1. **Mioara Zagrai**, Sergiu Gabriel Macavei, Radu Cristian Gavrea, Adriana Popa, Augusta Adriana Dehelean, Lucian Barbu-Tudoran, Maria - Loredana Soran, 2023. *Evaluation of the physical, thermal and structural properties of copper-lead glass for efficient incorporation of MoO<sub>3</sub>*, Journal of Alloys and Compounds, Volume 968, , 172062, ISSN 0925-8388, <https://doi.org/10.1016/j.jallcom.2023.172062>.
2. **Mioara Zagrai**, Gabriel Sergiu Macavei, Adriana Popa, Lucian Barbu-Tudoran, Radu Cristian Gavrea, Anca Raluca Mereu, Maria-Loredana Soran, 2023. *Structural, thermal and physical properties of cesium doped molybdenum-copper-lead glass*, Journal of Non-Crystalline Solids, Volume 619, 122577, ISSN 0022-3093, <https://doi.org/10.1016/j.jnoncrysol.2023.122577>.
3. Suciu, R.-C, **Zagrai, M.**, Popa, A., Toloman, D., Berghian-Grosan, C., Tudoran, C., Stefan, M. *The Influence of Ag<sup>+</sup>/Ti<sup>4+</sup> Ratio on Structural, Optical and Photocatalytic Properties of MWCNT–TiO<sub>2</sub>–Ag Nanocomposites*. Inorganics 2023, 11, 249. <https://doi.org/10.3390/inorganics11060249>
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6. Mioara Zagrai, Sergiu Macavei, Simona Rada, Maria Elena Pică, Stela Maria Pruneanu. Structural and spectroscopic properties of gadolinium-lead-lead dioxide glasses. Journal of Non-Crystalline Solids, Volume 576, 121234, (2022)

7. **Mioara Zagrai**, Ramona-Crina Suciu, Simona Rada, M.E. Pică, Stela Pruneanu. *Structural and optical properties of Eu<sup>3+</sup> ions in lead glass for photonic applications*, Journal of Non-Crystalline Solids, 569, 120988 (2021)
8. Adriana Dehelean, Simona Rada, **Mioara Zagrai**, Ramona Suciu & Csilla Molnar (2021) *Concentration Dependent Spectroscopic Properties of Terbium Ion Doped Lead-Borate Glasses and Vitroceramics*, Analytical Letters, 54:1-2, 88-97, DOI: [10.1080/00032719.2020.1723614](https://doi.org/10.1080/00032719.2020.1723614)
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2. Loredana Rus, T. Rusu, E. Culea, L. Bolunduț, P. Pășcuță, Elena Maria Pică, **Mioara Zagrai**, L. Pop and Simona Rada, 2014. "*The recycling of the wastes provided of auto batteries in lead glasses*", *Știință și Inginerie* (ISSN: 2067-7138), Editura AGIR, București, România, An XIV, Vol.26, pp.199-208.
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1. **Mioara Zagrai**, Gabriel Sergiu Macavei, Adriana Popa, Maria Loredana Soran. Glass for radioactive waste management. Book of abstract: " 32<sup>nd</sup> International Conference on Ecology & Safety, pp 35, Burgas, Bulgaria, 14-17.08.2023; **Oral presentation.**
2. **Mioara Zagrai**, Gabriel Sergiu Macavei, Adriana Augusta Dehelean, Maria Loredana Soran, Simulated radionuclides incorporation in lead based glass structure. Book of abstract: The 25<sup>nd</sup> International Conference "Materials, Methods & Technologies", pp 47, Burgas, Bulgaria, 17-20.08.2023; **Oral presentation.**
3. **M Zagrai**, G S Macavei, C Leostean and M L Soran, The influence of cations on molybdate species distributions in molybdenum-copper-lead glass. Book of abstract: The 14th International Conference "Processes in Isotopes and Molecules – PIM 2023", 19-22 September 2023, Cluj-Napoca, Romania, Poster T3-23, pg.116
4. C R Gavrea, and **M Zagrai**, Effect of Sr<sup>2+</sup> ions on the physical, optical and structural features on molybdenum-copper-lead glass, Book of abstract: The 14th International Conference "Processes in Isotopes and Molecules – PIM 2023", 19-22 September 2023, Cluj-Napoca, Romania, Poster T3-6, pg. 99
5. **M. Zagrai**, G. S. Macavei, R. Gavrea, A.D. Dehelean, A. Popa, M. L. Soran, Design and formulation of the copper-lead dioxide glass systems for efficient incorporation of MoO<sub>3</sub>, the IV International Scientific Forum "Nuclear science and Technologies", 26 – 30 September 2022, Republic of Kazakhstan, Almaty.

6. **M. Zagrai**, R. C. Suci, S. Macavei, A. Popa, S. Rada, A. Dehelean and S. Pruneanu  
Structural Evolution and Physical, Optical and Electrochemical Properties of Manganese Ions in Lead Glass. Book of abstract, Processes in Isotopes and Molecules, 13th International Conference, 22-24 September 2021, Cluj-Napoca, Romania, Poster T3-24, pp.7
7. **M Zagrai**, M Rada, R C Suci, S Macavei, M E Pica, S Rada and A Bot, 2019. "Glass-ceramic electrodes for electrochemical energy storage". 12<sup>th</sup> International Conference Processes in Isotopes and Molecules (PIM), Book of Abstracts, September 2019, Cluj - Napoca, Romania, 2019, POSTER T3-25, pp.77.
8. **Mioara Zagrai**, Simona Rada, Ramona Suci, Marius Rada, Adrian Bot , 2018. "Spectroscopic and electrochemical properties on the lead- lead dioxide-manganese dioxide vitroceramics," Book of Abstract: XXII<sup>nd</sup> National Conference with International Participation New Cryogenic and Isotope Technologies for Energy and Environment 24–26 October 2018, Băile Govora, România, POSTER, MSEE 23- P 174.
9. **Mioara Zagrai**, Simona Rada, Marius Rada, Eugen Culea, Maria Suci, Ramona Suci and Adriana Bot. 2018. "Structural Studies of Zirconia Ceramics for Dental Applications", S1 P15, Book of Abstract: 18th International Balkan Workshop on Applied Physics - Section 1 - MATERIALS PHYSICS, IBWAP 2018, 10-13 July, Constanța, România. POSTER, P13, pp. 42.
10. **Zagrai Mioara**, Dehelean Adriana, Rada Simona, Pica Elena Maria and Culea Eugen, 2018. "Structural and optical properties of the gadolinium-lead-borate glasses and vitroceramics", Fifth Edition of International Conference on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences, "IC-ANMBES 2018", 23-25 mai, Braşov, România, POSTER.
11. **Mioara Zagrai**, S. Rada, M. Rada, A. Pengfei, J. Zhang, R. C. Suci, E.M Pică and E. Culea, 2018. "Imobilizarea deşeurilor radioactive în sticle pe bază de plumb-dioxid de plumb și valorificarea produşilor pentru proprietăți fotoluminescente", SIMTECH, Ediția a 8-a, 31 mai 2018, Universitatea Tehnică din Cluj-Napoca, România, Carte de rezumate, Sesiunea de Comunicări Științifice studențești "SIMTECH", 2018. Prezentare orală, pp.12
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16. **Mioara Zagrai**, Elena Maria Pică, E. Culea, L. C. Bolunduț, N. Dura, Loredana Rus, and Simona Rada, 2014. "Imobilization of the radioactive wastes in vitreous systems on the base of lead", A XIV-a Conferință Internațională multidisciplinară - "Profesorul Dorin PAVEL- fondatorul hidroenergeticii românești" 6-7 iunie, Sebeș, România. Prezentare orală.
17. **Mioara Zagrai**, Elena Maria Pică, E. Culea, L. C. Bolunduț, Loredana Rus, Simona Rada and P. Pășcuță, 2014. "Electrochemical characterization and structure of lead-germanate glasses doping with  $\text{Li}_2\text{CO}_3$ ,  $\text{MoO}_3$ ,  $\text{WO}_3$  and  $\text{Bi}_2\text{O}_3$ ", S1 P12, Book of Abstract: 14th International Balkan Workshop on Applied Physics and Materials Science - Section 1 - MATERIALS PHYSICS, IBWAP 2014, 02-04 July, Constanța, România. POSTER, P12.
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#### 4. Brevete

1. "*Procedeu de preparare a ceramicilor zirconia parțial stabilizate cu alți oxizi*", RADA Simona, **ZAGRAI Mioara**, RADA Nicolae Marius, CULEA Eugen, MANOLE Marius, HENDEA Radu. **OSIM, RO 132713 din 29.04.2022.**
2. "*Procedeu de producere a unor placute metalice din  $\text{Pb-PbO}_2\text{-CuO}$  prin valorificarea electrozilor unor baterii auto uzate*", RADA Simona, **ZAGRAI Mioara**, RADA Nicolae Marius, CULEA Eugen, BOT Adrian, **OSIM, RO 132873 din 28.04.2023.**