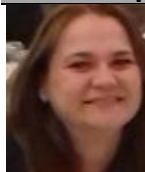


## Lista de publicații:



### 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 ISI: 8**

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

**Comunicări științifice la conferințe naționale și internaționale: 47**

**Cereri de brevet: 2**

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### I. Teza de doctorat în domeniul Ingineriei Mediului (2018)

"Sisteme oxidice vitroase cu aplicații în protecția mediului", coordonator științific Prof.dr.chim. Elena Maria PICA, 2018 - Universitatea Tehnică din Cluj-Napoca.

### II. Articole științifice publicate în reviste ISI (Thomson Reuters)

- 1.M. Rada, L. Bolundut, Maria Pica, **Mioara Zagrai**, Simona Rada and E. Culea, 2013. "*Mixed ionic-electronic conduction and electrochemical behavior of the lead and molybdenum ions in the lead-molybdate-germanate glasses*", *Journal of Non-Crystalline Solids* 365, 105-111.
- 2.Simona Rada, Loredana Rus, M. Rada, **Mioara Zagrai**, E. Culea and T. Rusu, 2014. "*Compositional dependence of structure, optical and electrochemical properties of antimony (III) oxide doped lead glasses and vitroceramics*", *Ceramics International*, 40, No.10, 15711-15716.
- 3.**Mioara Zagrai**, Loredana Rus, Simona Rada, S. Stan, M. Rada, L. Bolundut, Elena Maria Pica and E. Culea, 2014. "*Lead metallic-lead dioxide glasses as alternative of immobilization of the radioactive wastes*", *Journal of Non-Crystalline Solids*, 405, No.1,129-134.
- 4.Simona Rada, **Mioara Zagrai**, M. Rada, E. Culea, L. Bolundut, Mihaela Ligia Unguresan and Elena Maria Pica, 2016. "*Spectroscopic and electrochemical investigations of lead-lead dioxide glasses and vitroceramics with applications for rechargeable lead acid batteries*", *Ceramics International* 42, No.3, 3921-3929.
- 5.Rada, M., **Zagrai, Mioara**, Rada, Simona, Bot, A. and Culea, E., 2017. "*Effects on the characteristics of bonding and local structure in molybdenum-lead-lead dioxide glasses and vitroceramics*", *Journal of Alloys and Compounds*, 705, 327-332.
- 6.Marius Rada, Jing Zang, Wu Zhongua, **Mioara Zagrai**, Lidia Magerusan and Simona Rada, 2018. "*Spectroscopic characterization of dental composed of yttrium-stabilized zirconium*", *Analytical Letters*, 51, No.16, 2542-2548.
- 7.Simona Rada, **Mioara Zagrai**, M. Rada, Livia Magerusan, Adriana Popa, Ramona Suci, Macavei and Maria Suci, 2018. "*Structure, electrochemical characterization and the role of copper oxide in lead-lead dioxide glasses and vitroceramics*", *Journal of Non-Crystalline Solids*, 491, 55-63.
- 8.Sergiu Macavei, Marius Rada, **Mioara Zagrai**, Simona Rada, Victor Bodnarchuk, Radu Balan and Raul Erhan, 2018. "*Spectroscopic Characterization of a Lead-Lead Dioxide Automobile Battery*", *Analytical Letters*, 51,

### III. Articole științifice publicate în volumul unor conferințe

1. **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*", *Știință și Inginerie* (ISSN: 2067-7138), Editura AGIR, București, România, XIV, 26, 215-222.
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, XIV, 26, 199-208.
3. L.C. Bolunduț, Loredana Rus, E. Culea, Elena Maria Pică, **Mioara Zagrai** and Simona Rada, 2014. "*New types of glass as potential sensors to determine the nitrates anions from water*", *Știință și Inginerie* (ISSN: 2067-7138), Editura AGIR, București, România, XIV, 26, 209-214.
4. **Mioara Zagrai**, Nicolae Dura, Vasile Pop, Simona Rada, Elena Maria Pică, Marius Rada, and Eugen Culea, 2015. "*The integrated of the lead wastes in tellurate glasses*", *Știință și Inginerie* (ISSN: 2067-7138), Editura AGIR, București, România, 28, 539-548.

### IV. Comunicări științifice în cadrul unor conferințe naționale/ internaționale

1. **Mioara Zagrai**, M. Rada, Ramona Chelcea, Simona Rada, P. Pascuta, V. Dan and E. Culea, 2011. "*Structural Role of Europium Ions in Lead-Borate Glasses Inferred from Spectroscopic and DFT Studies*", The 4<sup>th</sup> International Conference Advanced Spectroscopies an Biomedicak and Nanostructured Systems (BIONANOSPEC), September 2-7, "Babeș - Bolyai" University of Cluj-Napoca, Romania. POSTER, PN38.
2. Ramona Chelcea, Simona Rada, Tania Ristoiu, Iliora Coroiu, **Mioara Zagrai** and E. Culea, 2011. "*Infrared, NMR spectroscopy and DFT investigations on structure of borate-tellurate glasses*", The 4<sup>th</sup> International Conference Advanced Spectroscopies an Biomedical and Nanostructured Systems (BIONANOSPEC), September 2-7, "Babeș - Bolyai" University of Cluj-Napoca, Romania. POSTER, PN39.
3. M. Rada, Loredana Rus, **Mioara Zagrai**, Simona Rada, Monica Culea, M. Neumann and E. Culea, 2011. "*FTIR, UV-VIS and EPR spectroscopy investigations on the structure of tungsten-lead-borate glasses*", The 4<sup>th</sup> International Conference on Advanced Spectroscopies on Biomedical and Nanostructured Systems (BIONANOSPEC), September 2-7, "Babeș - Bolyai" University, Cluj-Napoca, Romania. POSTER, PN40.
4. M.Rada, E.Culea, N.Aldea, A.Bot, Simona Rada, V.Rednic, **Mioara Zagrai**, and T.D. Filipas, 2012. "*Spectroscopic properties and theoretical investigations of the gadolinium-lead-tellurate glasses*", 7<sup>th</sup> International Conference on Advanced Materials, ROCAM 2012, 28-31 August, Brasov, România, POSTER, pp. 89.
5. **Mioara Zagrai**, Loredana Rus, E. Culea, Elena Maria Pică, N. Dura, L. Bolunduț, Simona Rada, V. Dan and A. Bot, 2013. "*Sticle pe bază de trioxid de gadolinu-plumb-dioxid de plumb ca alternativă la imobilizarea deșeurilor radioactive*", 9<sup>th</sup> National Symposium with International Participation "ENVIRONMENT AND PROGRESS" 25 October, "Babeș Bolyai" University of Cluj Napoca, România. POSTER.

6. L. C. Bolunduț, E. Culea, Loredana Rus, Elena Maria Pica, **Mioara Zagrai** and Simona Rada, 2014. "*New types of conductive lead glass with potential applications as electrodes for batteries*", S1 P10, *Book of Abstract: 14<sup>th</sup> International Balkan Workshop on Applied Physics and Materials Science - Section 1 - MATERIALS PHYSICS*, IBWAP 2014, 02-04 July, Constanța, Romania. POSTER, P10.
7. **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  $Li_2CO_3$ ,  $MoO_3$ ,  $WO_3$  and  $Bi_2O_3$* ", S1 P12, *Book of Abstract: 14<sup>th</sup> International Balkan Workshop on Applied Physics and Materials Science - Section 1 - MATERIALS PHYSICS*, IBWAP 2014, 02-04 July, Constanța, România. POSTER, P12.
8. Loredana Rus, E. Culea, T. Rusu, Simona Rada, **Mioara Zagrai**, N. Dura and M. Rada, 2014. "*Electrodes based on lead glasses and vitrocemicals for rechargeable batteries*", S1 P13, *Book of Abstract: 14<sup>th</sup> International Balkan Workshop on Applied Physics and Materials Science - Section 1 - MATERIALS PHYSICS*, IBWAP 2014, 02-04 July, Constanța, România. POSTER P13.
9. **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.
10. Loredana Rus, T. Rusu, E. Culea, L. C. 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*", A XIV-a Conferință *Internațională* multidisciplinară - "Profesorul Dorin PAVEL- fondatorul hidroenergeticii românești" 6-7 iunie, Sebeș, România. Prezentare orală.
11. L. C. Bolunduț, Loredana Rus, E. Culea, Elena Maria Pică, **Mioara Zagrai** and Simona Rada, 2014. "*New types of glass as potential sensors to determine the nitrates anions from water*", A XIV-a Conferință *Internațională* multidisciplinară - "Profesorul Dorin PAVEL- fondatorul hidroenergeticii românești" 6-7 iunie, Sebeș, România. Prezentare orală.
12. Loredana Rus, **Mioara Zagrai**, T. Rusu, M. Rada, E. Culea and Simona Rada, 2014. "*Recycling of the Lead-acid Battery by Immobilization in the Glasses and Vitrocemicals*", 10<sup>th</sup> Edition of *International Conference: ELSEDIM* "Environmental Legislation, Safety Engineering and Disaster Management" 18<sup>th</sup>-19<sup>th</sup> September, "Babeș Bolyai" University of Cluj-Napoca, România. POSTER.
13. **Mioara Zagrai**, Loredana Rus, L. Bolunduț, Simona Rada, Elena Maria Pică and E. Culea, 2014. "*The Immobilization of Radioactive Wastes in the Lead Glasses*", 10<sup>th</sup> Edition of *International Conference: ELSEDIM* "Environmental Legislation, Safety Engineering and Disaster Management" 18<sup>th</sup>-19<sup>th</sup> September, "Babeș Bolyai" University of Cluj-Napoca, România. POSTER.
14. **Mioara Zagrai**, N. Dura, V. Pop, Simona Rada, Elena Maria Pică, M. Rada and E. Culea, 2015. "*The integrated of the lead wastes in tellurate glasses*", A XV-a Conferință *Internațională* multidisciplinară - "Profesorul Dorin PAVEL- fondatorul hidroenergeticii românești" 5-6 iunie, Sebeș, România. Prezentare orală.
15. M. Rada, N. Aldea, S. Rada, R. C. Suci, S. Macavei, A. Bot, E. Culea, **Mioara Zagrai** and R. Balan, 2015. "*Local and electronic structure of lithium-lead-germanate glasses investigated by XAS and Raman methods*", 10<sup>th</sup> International Conference Processes in Isotopes and Molecules, Institutul Național de Cercetare-Dezvoltare pentru Tehnologii Izotopice și Moleculare (INCDTIM), 23-25 septembrie, Cluj-Napoca, Romania, T4-4.

- 16.S. Rada, **M. Zagrai**, M. Rada, N. Aldea, L. Magerusan, S. Macavei, A. Bot and E. Culea, 2016. "*Structural, optical and electrochemical behaviour of antimony (III) oxide – lead – lead dioxide glasses and vitroceramic*", 21<sup>st</sup> Conference "Progress in Cryogenics and Isotopes Separation", 19-21 October, 2016, Călimănești-Căciulata, Vâlcea, România, POSTER, P12.
- 17.Ramona - Crina Suci, Loredana Rus, Simona Rada **Mioara Zagrai**, Marius Rada, E. Culea and Adrian Bot, 2017. "*The Effect of the Sodium and Silicium Oxide Dopants on Stabilization of The Cubic Phase in Zirconia Ceramic With Higher Yttria Content*", S1 P13, *Book of Abstract: 17<sup>th</sup> International Balkan Workshop on Applied Physics and Materials Science - Section 1 - MATERIALS PHYSICS*, IBWAP 2017, 11-14 July, Constanța, România, POSTER, pp.39.
- 18.L. Rus, S. Rada, **Mioara Zagrai**, M. Rada, R. C. Suci, E. Culea, P. Pascuta, M. Manole, R. Hendea and A. Bot, 2017. "*Iron-Yttria-Zirconia Ceramics Containg Cubic Zirconia Crystalline Phase*", S1 P2, *Book of Abstract: 17<sup>th</sup> International Balkan Workshop on Applied Physics and Materials Science - Section 1 - MATERIALS PHYSICS*, IBWAP 2017, 11-14 July, Constanța, România, POSTER, pp.32.
- 19.Lidia Pop, **Mioara Zagrai**, Marius Rada, Petru Pășcuta, Ramona Suci, Simona Rada and Eugen Culea, 2017. "*Zirconium Oxide Based Ceramics With Possible Biomedical Applications*", S1 P16, *Book of Abstract: 17<sup>th</sup> International Balkan Workshop on Applied Physics and Materials Science - Section 1 - MATERIALS PHYSICS*, IBWAP 2017, 11-14 July, Constanța, România, POSTER.
- 20.M. Rada, Wu Zhonghua, Jing Zhang, L. Magerusan, **Mioara Zagrai** and S. Rada, 2017. "*Structural Behavior of Dental Ceramic Materials Based on Yttria Oxidestabilized Zirconia*", S1 P28, *Book of Abstract: 17<sup>th</sup> International Balkan Workshop on Applied Physics and Materials Science - Section 1 - MATERIALS PHYSICS*, IBWAP 2017, 11-14 July, Constanța, România, POSTER, pp.50.
- 21.S. Macavei, M. Rada, **Mioara Zagrai**, S. Rada, V. Bodnarchuk and R.V. Erhan, 2017. "*Structural Investigation of Copper(II) Oxide-Lead Oxide-Lead Vitreous System Obtained by Active Electrodes of the Disassembled Car Battery*", S5 P12, *Book of Abstract: 17<sup>th</sup> International Balkan Workshop on Applied Physics and Materials Science – Section 5 - ENGINEERING AND INDUSTRIAL PHYSICS*, IBWAP 2017, 11-14 July, Constanța, România, POSTER, pp.169.
- 22.**Mioara Zagrai**, M. Rada, R. C. Suci, S. Macavei, S. Rada and A. Bot, 2017. "*Structure and Electrochemical Performances of the of The Electrodes Obtained by the Recycling of Lead Acid Batteries and the Addition of Vanadium (V) Oxide*", S5 P31, *Book of Abstract: 17<sup>th</sup> International Balkan Workshop on Applied Physics and Materials Science – Section 5 - ENGINEERING AND INDUSTRIAL PHYSICS*, IBWAP 2017, 11-14 July, Constanța, România, POSTER, pp.181.
- 23.M. Rada, Wu Zhonghua, Jing Zhang, A. Bot, **M. Zagrai** and S. Rada, 2017. "*Survey analysis of dental ceramic materials based on yttria oxide-stabilized zirconia*", 5<sup>th</sup> International Conference on Green Chemistry and Technology, 24-26 July, Rome, Italy, POSTER, Vol. 3, No. 2, pp.110.
- 24.Rada Simona, **Mioara Zagrai**, Culea Eugen, Rada Marius, Bot Adrian, Erhan Raul, Pana Ovidiu and V. Bodnarchuk, 2017. "*Ferric oxide and yttria-stabilized zirconia for dental applications*". O79, *Book of Abstract: 3<sup>rd</sup> International Turkish Congress on Molecular Spectroscopy (TURCMOS 2017)*, 26–29 August 2017, Muğla/Bodrum, Turkey, Presentare orală, pp.120.
- 25.M. Rada, J. Zhang, W. Zhonghua, S. Rada, L. Magerusan, A. Bot, **M. Zagrai** and N. Aldea, 2017. "*Structural*

- analysis of Sb<sub>2</sub>O<sub>3</sub> doped lead-lead dioxide glass ceramics by XRD and XAS spectroscopy*", 11<sup>th</sup> International Conference Processes in Isotopes and Molecules (PIM), Book of Abstracts, September 2017, Cluj – Napoca, Romania, 2017, POSTER, T4-41, pp.88.
- 26.** S Rada, **Mioara Zagrai**, R V Erhan, M Rada, A Bot, O Pana and V Bodnarchuk, 2017. "*Behaviour of zirconia-magnesia ceramics in the presence of iron(III) oxide*", 11<sup>th</sup> International Conference Processes in Isotopes and Molecules (PIM), Book of Abstracts, September 2017, Cluj – Napoca, Romania, 2017, POSTER T4-42, pp.88.
- 27.** R. C. Suciuciu, L. Rus, S. Rada, C. Groșan, **Mioara Zagrai**, M. Suciuciu, M. Rada, E. Culea and A. Bot, 2017. "*Yttria and sodium oxide stabilized silica-zirconia ceramics for dental applications*", 11<sup>th</sup> International Conference Processes in Isotopes and Molecules (PIM), Book of Abstracts, 27-29 September, 2017, Cluj-Napoca, Romania, POSTER T4-50, pp.92.
- 28.** **Mioara Zagrai**, M. Suciuciu, A. Popa, S. Rada, R. C. Suciuciu, M. Rada, A. Bot and S. Macavei, 2017. "*Evaluating the lead affinity of V<sub>2</sub>O<sub>5</sub> additives used in spent lead acid battery recycling*", 11<sup>th</sup> International Conference Processes in Isotopes and Molecules (PIM), Book of Abstracts, September 2017, Cluj - Napoca, Romania, 2017, POSTER T4-53, pp.94.
- 29.** **Mioara Zagrai**, S. Rada, M. Rada, A. Pengfei, J. Zhang, R. C. Suciuciu, E.M Pică and E. Culea, 2018. "*Imobilizarea deșeurilor radioactive în sticle pe bază de plumb-dioxid de plumb și valorificarea produșilor pentru proprietăți fotoluminescente*", SIMTECH, Ediția a 8-a, 31 mai 2018, Universitatea Tehnică din Cluj-Napoca, România, *Carte de rezumate*, Sesiunea de Comunicări Științifice studentești "SIMTECH", 2018. Prezentare orală, pp.12
- 30.** **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, Brașov, România, POSTER.
- 31.** Marius RADA, **Mioara Zagrai**, Simona Rada, An Pengfei, Jing Zhang, Maria Suciuciu, Ramona Suciuciu, Eugen Culea and Adrian Bot, 2018. "*Stabilized zirconia ceramics studied via spectroscopic methods*", S1 P9, *Book of Abstract: 18<sup>th</sup> International Balkan Workshop on Applied Physics - Section 1- MATERIALS PHYSICS*, IBWAP 2018, 10-13 July, Constanța, România. POSTER, P9. pp.38
- 32.** Simona Rada, **Mioara Zagrai**, Marius Rada, An Pengfei, Jing Zhang and Eugen Culea, 2018. "*Partially Stabilized Zirconium Dioxide Ceramics as Dental Materials*" S1 P13, *Book of Abstract: 18<sup>th</sup> International Balkan Workshop on Applied Physics - Section 1 - MATERIALS PHYSICS*, IBWAP 2018, 10-13 July, Constanța, România. POSTER, P13, pp.41
- 33.** **Mioara Zagrai**, Simona Rada, Marius Rada, Eugen Culea, Maria Suciuciu, Ramona Suciuciu and Adriana Bot. 2018. "*Structural Studies of Zirconia Ceramics for Dental Applications*", S1 P15, *Book of Abstract: 18<sup>th</sup> International Balkan Workshop on Applied Physics - Section 1 - MATERIALS PHYSICS*, IBWAP 2018, 10-13 July, Constanța, România. POSTER, P13, pp. 42.
- 34.** Marius Rada, An Pengfei, **Mioara Zagrai**, Simona Rada, Jing Zhang and Eugen Culea, 2018. "*Dental materials based on stabilized zirconia ceramics*", *Book of Abstract: XXXIV European Congress on Molecular Spectroscopy - EUCMOS 2018, Biospectroscopy Biomedical Applications*, Coimbra – Portugal 19 – 24 August, POSTER, P 8.16, pp. 322.

35. Simona Rada, **Mioara Zagrai**, Marius Rada, An Pengfei, Jing Zhang, Adrian Bot and Eugen Culea, 2018. „*Stabilized Zirconia Ceramics with Additions of Y<sub>2</sub>O<sub>3</sub>, SiO<sub>2</sub>, Fe<sub>2</sub>O<sub>3</sub> and Na<sub>2</sub>O Contents for Dental Applications*”. *Book of Abstract: XXXIV European Congress on Molecular Spectroscopy - EUCMOS 2018, Biospectroscopy Biomedical Applications, Coimbra – Portugal, 19 – 24 August, POSTER, P 8.17, pp.323.*
36. Marius Rada, **Mioara Zagrai**, Jing Zhang, An Pengfei, Simona Rada, 2018. “*XAS and XRD studies on the structure of vitroceramic eletrodes based on lead-lead dioxide-manganese dioxide*”. *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, Prezentare orală, MSEE 6- O, pp. 141.*
37. Simona Rada, **Mioara Zagrai**, Marius Rada, Lidia Magerusan, Ramona Suciu, Maria Suciu, 2018. “*Electrochemical performances of lead-lead dioxide-copper oxide glasses and vitroceramics as electrodes for batteries*”, *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, pp. 172.*
38. **Mioara Zagrai**, Simona Rada, Ramona Suciu, 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.*
39. Simona Rada, Adriana Popa, Marius Rada, **Mioara Zagrai**, Adriana Dehelean, Sergiu Macavei, 2018. “*Structure and eletrochemical performances of manganese dioxide-copper oxide-lead-lead oxide as electrodes for car batteries*”. *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, LQET- 31 – P, pp. 252.*
40. Adriana DEHELEAN, Simona RADA, **Mioara ZAGRAI**, Ramona SUCIU, Sergiu MACAVEI, 2019. "Influence of samarium ions concentration on structural and optical properties of lead borate glasses and vitroceramics". *Book of Abstract: 19<sup>th</sup> International Balkan Workshop on Applied Physics and Materials Science – Section 1 - Materials Physics, IBWAP 2019, 16-19 July, Constanța, România, POSTER, S1 P35, pp.58.*
41. Adriana DEHELEAN, Simona RADA, **Mioara ZAGRAI**, Adriana POPA, Ramona SUCIU, 2019. "Spectroscopic studies of samarium ions in lead borate glass - ceramics".. *Book of Abstract: 19<sup>th</sup> International Balkan Workshop on Applied Physics and Materials Science – Section 1 - Materials Physics, IBWAP 2019, 16-19 July, Constanța, România, POSTER, S1 P34, pp. 59.*
42. Marius Rada, An Pengfei, **Mioara Zagrai**, Jing Zhang, Simona Rada, 2019. "Manganese-lead-lead dioxide electrode vitroceramics". 21<sup>st</sup> Romanian International Conference on Chemistry and Chemical Engineering, RICCE, Book of Abstracts, September 2019, Mamaia, Romania, 2019, POSTER S3 – 141.
43. Adriana Dehelean, Simona Rada, Ramona Suciu, **Mioara Zagrai**, Sergiu Macavei, 2019. "XRD, UV-Vis and Photoluminescence studies of terbium ions doped 4PbO-B<sub>2</sub>O<sub>3</sub> glasses and vitroceramics". 21<sup>st</sup> Romanian International Conference on Chemistry and Chemical Engineering, RICCE 21, Book of Abstracts, September 2019, Mamaia, Romania, 2019, POSTER S6 – 216
44. Adriana Dehelean, Simona Rada, **Mioara Zagrai**, C. Grosan, Adriana Popa. "Influence of samarium ions on structural properties of lead-borate glasses and vitroceramics". 21<sup>st</sup> Romanian International Conference on

Chemistry and Chemical Engineering, RICCCCE 21, Book of Abstracts, September 2019, Mamaia, Romania, 2019, POSTER S6 – 211.

- 45.** M Rada, **M Zagrai**, D Cuibus, S Macavei, R Erhan, V Bodnarchuk and S Rada, 2019. "Structural investigation of recycled and vanadium-copper doped materials "12<sup>th</sup> International Conference Processes in Isotopes and Molecules (PIM), Book of Abstracts, September 2019, Cluj - Napoca, Romania, 2019, POSTER T3-15, pp.72.
- 46.** S Rada, L Mihaila, A Popa, S Macavei, **M Zagrai**, M Rada, M Suciuc and J Zhang, 2019. "An overview on the structure of recycled materials from spent lead acid battery and modified with CuO and MnO<sub>2</sub> ". 12<sup>th</sup> International Conference Processes in Isotopes and Molecules (PIM), Book of Abstracts, September 2019, Cluj - Napoca, Romania, 2019, POSTER T3-16, pp.72.
- 47.** **M Zagrai**, M Rada, R C Suciuc, 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.

#### V. Cereri de brevete:

1. RADA Simona, **ZAGRAI Mioara**, RADA Nicolae Marius, CULEA Eugen, MANOLE Marius, HENDEA Radu, "Procedeu de preparare a ceramicilor zirconia parțial stabilizate cu alți oxizi", Nr. A/00160 din 07.03.2018.
2. RADA Simona, **ZAGRAI Mioara**, RADA Nicolae Marius, CULEA Eugen, BOT Adrian, "Procedeu de preparare, optimizare și aplicare a materialelor reciclate de la electrozii unei baterii auto uzate", Nr. A/00282/20.04.2018.