

## **Lista lucrărilor publicate**

### **A. Lucrări selectate**

1. **Iordana AȘTEFĂNOAEI**, Alexandru STANCU, “Heat transfer computations in an intravascular tumoral region for magnetic hyperthermia, **European Physical Journal Plus**, 137(12), (2022).
2. **Iordana AȘTEFĂNOAEI**, Alexandru STANCU, “Optimal control of the hyperthermic thermal damage within intravascular tumoral regions“, **Journal of Magnetism and Magnetic Materials** 537, 168221, (2021).
3. **Iordana AȘTEFĂNOAEI**, Alexandru STANCU, “Thermo-fluid porosity-related effects in the magnetic hyperthermia“, **European Physical Journal Plus**, 136(12), (2021).
4. **Iordana AȘTEFĂNOAEI**, Alexandru STANCU,“A computational study of the bioheat transfer in magnetic hyperthermia cancer therapy“, **Journal of Applied Physics**, 125(19), pp. 194701, (2019).
5. **Iordana AȘTEFĂNOAEI**, Alexandru STANCU,”Advanced thermo-mechanical analysis in the magnetic hyperthermia”, **Journal of Applied Physics**, 122(16), 164701 (2017).
6. **Iordana AȘTEFĂNOAEI**, Alexandru STANCU, Horia CHIRIAC, “Thermal performance of Fe-Cr-Nb-B systems in magnetic hyperthermia“, **Journal of Applied Physics**, 121(10), pp. 104701, (2017).
7. M. PINTO, M. PIMPINELLA, M. QUINI, M D”ARIENZO, I. AȘTEFĂNOAEI, S. LORETI, A.S. GUERRA, “A graphite calorimeter for absolute measurements of absorbed dose to water: application in medium-energy x-ray filtered beams“, **Physics in medicine and biology**, 61(4), pp. 1738, (2016).
8. **Iordana AȘTEFĂNOAEI**, Horia CHIRIAC, Alexandru STANCU, “Investigation of the temperature field in the magnetic hyperthermia using FeCrNbB magnetic particles“, **The European Physical Journal Plus**, 131(9), pp.322, (2016).
9. **Iordana AȘTEFĂNOAEI**, D. RADU, H. CHIRIAC, “Internal stress distribution in DC joule-heated amorphous glass-covered microwires”, **J. Phys: Condens. Matter**, 18(9), pp. 2689-2716, (2006).
10. **Iordana AȘTEFĂNOAEI**, D. RADU, H. CHIRIAC, “On DC Joule-Heating Effects in the Amorphous Glass-Covered Fe<sub>77.5</sub>Si<sub>7.5</sub>B<sub>15</sub> Microwires“, **Journal of Physics D: Applied Physics**, 38(2), pp 235-248, (2005).

## B. Teza de doctorat

**Titlul:** Proprietăți globale ale unor structuri spațio – temporale algebric special obținute ca soluții exacte ale ecuațiilor Einstein, Iași, 2000.

## C. Cărți și Capitole în Cărți

### Capitole de cărți:

[1]. **Iordana Aștefanoaei**, Alexandru Stancu, Modeling of the Temperature Field in the Magnetic Hyperthermia (book chapter) in cartea: **Numerical Simulations in Engineering and Science**, IntechOpen,(2018), [DOI: 10.5772/68125](#), ISBN: 978-1-78923-451-0, Print ISBN: 978-1-78923-450-3, Indexed Web of Science (Book citation index).

[https://www.researchgate.net/profile/Iordana\\_Astefanoaei/publications](https://www.researchgate.net/profile/Iordana_Astefanoaei/publications).

### Cărți:

[1]. Daniel Radu, **Iordana Aștefanoaei**, Notiuni fundamentale si probleme de mecanică analitică, Editura SEDCOM LIBRIS (2005), (**510 pagini**), ISBN 973-670-127-1.

[2]. Daniel Radu, **Iordana Aștefanoaei**, Ioan Merches, **Culegere de probleme de electrodinamică**, Editura ȘTEF (2009), (**400 pagini**), ISBN 978-973-1809-49-6.

[3]. **Iordana Aștefanoaei**, Ciprian Dariescu, Marina-Aura Dariescu, **Modele speciale de Univers și patologii spațio-temporale**,(2007); Editura Universității Alexandru Ioan Cuza din Iași, (**235 pagini**), ISBN 978-973-703-205-8.

## D. Lucrări în extenso publicate în reviste ISI

1. Horia CHIRIAC, **Iordana AȘTEFANOAEI**, “A Model of the DC Joule Heating in Amorphous Wires“ **Phys. Stat. Sol. A**, 153(1), pp. 183-189, (1996).
2. **Iordana AȘTEFĂNOAEI**, D. RADU, H. CHIRIAC, “On DC Joule-Heating Effects in the Amorphous Glass-Covered Fe<sub>77.5</sub>Si<sub>7.5</sub>B<sub>15</sub> Microwires“, **Journal of Physics D: Applied Physics**, 38(2), pp 235-248, (2005).
3. **Iordana AȘTEFĂNOAEI**, D. RADU, H. CHIRIAC, “Temperature Distributions in DC Joule-

Heated Amorphous Magnetic Materials“, **Journal of Optoelectronics and Advanced Materials**, 7(2), pp.933-950, (2005).

4. **Iordana AŞTEFĂNOAEI**, D. RADU, H. CHIRIAC „Temperature Distributions in DC Joule-Heated Amorphous Ribbons”, **Phys. Stat. Sol. A**, 202(13), pp. 2419-2435, (2005).
5. **Iordana AŞTEFĂNOAEI**, D. RADU, H. CHIRIAC, “Internal stress distribution in DC joule-heated amorphous glass-covered microwires”, **J. Phys: Condens. Matter**, 18(9), pp. 2689-2716, (2006).
6. **Iordana AŞTEFĂNOAEI**, D. RADU, H. CHIRIAC „The supplementary compression stresses in Fe-B-Si wires”, **Journal of Optoelectronics and Advanced Materials**, 8(5), pp. 1736-1741, (2006).
7. **Iordana AŞTEFĂNOAEI**, D. RADU, H. CHIRIAC, „Induced residual stresses in the preparation process of the glass-covered amorphous magnetic microwires”, **Journal of Optoelectronics and Advanced Materials**, 8(3), pp. 978-983, (2006).
8. **Iordana AŞTEFĂNOAEI**, D. RADU, “Distribution of the Internal Stresses in DC Joule Heated Fe<sub>77.5</sub>B<sub>15</sub>Si<sub>7.5</sub> Conventional Amorphous Microwires”, **Journal of Physics D: Applied Physics**, 39(18), pp. 3921–3931, (2006).
9. **Iordana AŞTEFĂNOAEI**, D. RADU, H. CHIRIAC, “The residual stresses of FeBSi – type in an ingot mould“, **Journal of Optoelectronics and Advanced Materials**, 8(5), pp. 1731-1736, (2006).
10. **Iordana AŞTEFĂNOAEI**, Ioan DUMITRU, Raimond GRIMBERG, Alexandru STANCU, “The energetic states of quantum dots in the presence of a metallic layer“, **Journal of Magnetism and Magnetic Materials**, 316(2) pp. e273-e275, (2007).
11. **Iordana AŞTEFĂNOAEI**, Alexandru STANCU, Horia CHIRIAC, “The effect of dc Joule-heating structure of conventional amorphous wires“, **Journal of Magnetism and Magnetic Materials**, 316(2), pp. e276 – e279, (2007).
12. **Iordana AŞTEFĂNOAEI**, Alexandru STANCU, Horia CHIRIAC, “Magnetic domains structure of dc Joule-heated conventional amorphous“, **Sensor Letters**, 5(1), pp.19-22, (2007).

- 13. Iordana AŞTEFĂNOAEI**, Ioan DUMITRU, Raimond GRIMBERG, Alexandru STANCU, “The effect of a metallic layer on energetic states of quantum dots“, **Sensor Letters**, 5(1), pp. 185-188, (2007).
- 14. Iordana AŞTEFĂNOAEI**, H. CHIRIAC, A. STANCU, “The internal thermal stresses during the cooling process of a nanowire from alumina membrane“, **Journal of optoelectronics and advances materials**, 10(7), pp.1763 – 1766, (2008).
- 15. Ioan DUMITRU, Iordana AŞTEFĂNOAEI**, Raimond GRIMBERG, Alexandru STANCU, “The energy states of cylindrical quantum dot systems“, **Journal of optoelectronics and advances materials**, 10(2), pp. 327 - 330, (2008).
- 16. Iordana AŞTEFĂNOAEI**, Horia CHIRIAC, Alexandru STANCU, “Magnetic domains structure in DC Joule-heated amorphous glass-covered magnetic wires“, **Journal of optoelectronics and advances materials**, 10(2), pp. 260 - 263, (2008).
- 17. Iordana AŞTEFĂNOAEI**, Ioan DUMITRU, Andrei DIACONU, Leonard SPINU, Alexandru STANCU, “The temperature dependence of hysteretic processes in Co nanowires arrays“, **Journal of Applied Physics**, 103(7), pp.07D930, (2008).
- 18. Ioan DUMITRU, Iordana AŞTEFĂNOAEI**, Alexandru STANCU, “The energy eigenstates of two quantum dots systems placed at the air-semiconductor interface“, **Journal of optoelectronics and advances materials**, 11(5), pp. 542-546, (2009).
- 19. Veronica GOIAN, Ioan DUMITRU, Iordana AŞTEFĂNOAEI**, “The effect of temperature on magnetostatic interactions in nanowire systems“, **Journal of optoelectronics and advances materials**, 11(5), pp. 542-546, (2009).
- 20. Daniel RADU, Antonio Stefano GUERRA, Cristina IONITĂ, Iordana AŞTEFĂNOAEI**, “Heat loss through connecting thermistor wires in a three-body graphite calorimeter“, **Metrologia** , 47(3), pp.179, (2010).
- 21. Cristina IONITĂ, Daniel RADU, Iordana AŞTEFĂNOAEI**, “Radiative Heat Loss Correction for 3-Body Graphite Calorimeters“, **Acta Physica Polonica A**, 118(4), (2010).
- 22. Marina-Aura DARIESCU, Ovidiu BUHUCIANU, Iordana AŞTEFĂNOAEI**, “Chiral electrons in static fields at finite temperature“, **Romanian Journal in Physics**, 56(9-10), pp1043-1052, (2011).

- 23. Iordana AŞTEFĂNOAEI**, Ioan DUMITRU, Alexandru STANCU, “Induced Thermal Stresses in Core Shell Magnetic Particles“, **IEEE Trans. Magnetics**, 47(10), pp 3829 - 3832, (2011).
- 24. A. S. GUERRA, S LORETI, M PIMPINELLA, M QUINI, M D'ARIENZO, I. AŞTEFĂNOAEI, C CAPORALI, C BOLZAN, M PAGLIARI ,** “A standard graphite calorimeter for dosimetry in brachytherapy with high dose rate  $^{192}\text{Ir}$  sources“, **Metrologia** , 49(5), pp. S179, (2012).
- 25. Iordana AŞTEFĂNOAEI**, Ioan DUMITRU, Alexandru STANCU, “Size-dependent thermal stresses in the core-shell nanoparticles“, **Chinese Physics B**, 22(12), pp. 128102, (2013).
- 26. Ioan DUMITRU, Iordana AŞTEFĂNOAEI, Alexandru STANCU**, “Thermal stress dependence of magnetic hysteretic processes in core-shell nanoparticles“, **Materials Science and Engineering B**, 178(19), pp. 1323-1328, (2013).
- 27. Cristina IONITĂ, Daniel RADU, Iordana AŞTEFĂNOAEI**, “3D- modeling of temperature gradients induced by electrical power dissipation in a 3-body Domen-type calorimeter for absorbed dose measurements“, **Materials Science and Engineering B** 178(19), pp.1275-1284, (2013).
- 28. Iordana AŞTEFĂNOAEI**, Ioan DUMITRU, Alexandru STANCU, Horia CHIRIAC, “A thermo-fluid analysis in magnetic hyperthermia“, **Chinese Physics B**, 23(4), pp.044401, (2014).
- 29. Iordana AŞTEFĂNOAEI**, Ioan DUMITRU, Alexandru STANCU , Horia CHIRIAC, “Controlling Temperature in Magnetic Hyperthermia with low Curie Temperature Particles“, **Journal of Applied Physics**, 115(17), pp. 17B531, (2014).
- 30. Iordana AŞTEFĂNOAEI**, Ioan DUMITRU, Alexandru STANCU , Horia CHIRIAC, “Use of the Fe–Cr–Nb–B systems with low curie temperature as mediators in magnetic hyperthermia“, **IEEE Transactions on Magnetics**, 50(11), pp.1-4, (2014).
- 31. Ioan DUMITRU, Iordana AŞTEFĂNOAEI**, Dorin CIMPOEŞU, Alexandru STANCU, “Magnetic behavior of Joule-heated magnetic core–shell nanowires with positive magnetostrictive core material“, **Applied Surface Science**, 352(54-59), (2015).

- 32.** M. PINTO, M. PIMPINELLA, M. QUINI, M D'ARIENZO, I. AŞTEFĂNOAEI, S. LORETI, A.S. GUERRA, "A graphite calorimeter for absolute measurements of absorbed dose to water: application in medium-energy x-ray filtered beams", **Physics in medicine and biology**, 61(4), pp. 1738, (2016).
- 33.** Iordana AŞTEFĂNOAEI, Horia CHIRIAC, Alexandru STANCU, "Investigation of the temperature field in the magnetic hyperthermia using FeCrNbB magnetic particles", **The European Physical Journal Plus**, 131(9), pp.322, (2016).
- 34.** Iordana AŞTEFĂNOAEI, Ioan DUMITRU, Horia CHIRIAC, Alexandru STANCU, Thermofluid Analysis in Magnetic Hyperthermia Using Low Curie Temperature Particles, **IEEE Transactions on Magnetics**, 52(7), pp.1-4, (2016).
- 35.** Iordana AŞTEFĂNOAEI, Alexandru STANCU, Horia CHIRIAC, "Thermal performance of Fe-Cr-Nb-B systems in magnetic hyperthermia", **Journal of Applied Physics**, 121(10), pp. 104701, (2017).
- 36.** Iordana AŞTEFĂNOAEI, Alexandru STANCU, Horia CHIRIAC, "Numerical simulation of the temperature field in magnetic hyperthermia with Fe-Cr-Nb-B magnetic particles", **The European Physical Journal Plus**, 132(2), pp. 89, (2017).
- 37.** Iordana AŞTEFĂNOAEI, Alexandru STANCU, "Advanced thermo-mechanical analysis in the magnetic hyperthermia", **Journal of Applied Physics**, 122(16), 164701 (2017).
- 38.** Iordana AŞTEFĂNOAEI, Alexandru STANCU, "A computational study of the bioheat transfer in magnetic hyperthermia cancer therapy ", **Journal of Applied Physics**, 125(19), pp. 194701, (2019).
- 39.** Iordana Astefanoaei, Radel Gimaev, Vladimir I. Zverev, Alexandru Stancu, "Modelling of working parameters of Gd and FeRh nanoparticles for magnetic hyperthermia", (November 2019), **Materials Research Express**, vol 6(12), 5089, DOI: [10.1088/2053-1591/ab5c4a](https://doi.org/10.1088/2053-1591/ab5c4a).
- 40.** Iordana AŞTEFĂNOAEI, Alexandru STANCU, "Optimal control of the hyperthermic thermal damage within intravascular tumoral regions", **Journal of Magnetism and Magnetic Materials** 537, 168221, (2021).
- 41.** Iordana AŞTEFĂNOAEI, Alexandru STANCU, "Thermo-fluid porosity-related effects in the magnetic hyperthermia", **European Physical Journal Plus**, 136(12), (2021).

- 42. Iordana AŞTEFĂNOAEI**, Alexandru STANCU, “Heat transfer computations in an intravascular tumoral region for magnetic hyperthermia, **European Physical Journal Plus**, 137(12), (2022).

## ISI – Conference Proceeding

1. **Iordana Astefanoaei**, Alexandru Stancu, Horia Chiriac, Ioan Dumitru, Monitoring the thermal effects in the magnetic hyperthermia, **IEEE-2013 E-HEALTH AND BIOENGINEERING CONFERENCE (EHB)**, 2013 .
2. M. Pinto, M. Pimpinella, A.S. Guerra, **I. Aştefănoaei**, M.Quini, M.P. Toni, “Development of a new in-water-phantom graphite calorimeter for the measurement of absorbed dose to water in medium energy x-ray beams“, **16<sup>th</sup> International Congress of Metrology, 05009**, (2013) – EDP Sciences- Web of Conferences (indexat <https://www.webofconferences.org/organizers>), <http://cfmetrologie.edpsciences> .or <http://dx.doi.org/10.1051/metrology/201305009>.
3. **Iordana Astefanoaei**, Alexandru Stancu, A temperature analysis in magnetic hyperthermia, **AIP CONF PROC - TIM17 Physics Conference**, 1916 (1), 040009, (2017.)
4. **Iordana Astefanoaei**, Alexandru Stancu, Horia Chiriac, Magnetic hyperthermia with Fe-Cr-Nb-B magnetic particles, **AIP CONF PROC - TIM15-16 Physics Conference**, 1796 (1), 040006.
5. **Iordana Astefanoaei**, Alexandru Stancu, Magnetic Nanoparticle Dosimetry in Hyperthermia Therapy, **AIP CONF PROC - TIM19 Physics Conference**, 2019.
6. **Iordana AŞTEFĂNOAEI**, Alexandru STANCU, Magnetic Hyperthermia with biocompatible coated nanoparticles: A temperature analysis, presented at International Conference on Electromagnetic Fields, Signal and Biomedical Engineering (ICEMS - BIOMED) and published in IOP Conference Series: Materials Science and Engineering indexed Clarivate, ISI Web of Science, (2022).

## Lucrări în extenso publicate în reviste non-ISI

1. Samir Taloub, Farida Hobar, **Iordana Aştefănoaei**, Ioan Dumitru, Ovidiu Florin Călțun, FEM Investigation, of Coated Magnetic Nanoparticles for Hyperthermia, **Nanoscience and Nanotechnology**, 6(1A), 55-61, (2016).
2. **Iordana Aştefănoaei**, Ioan Dumitru, Alexandru Stancu, Laser Heating of Core-Shell Nanowires, **Annals of West University of Timișoara**, 59(1), 2-12, (2016).
3. Anamaria Doaga, Cristin Constantin, Alina Cojocaru, **Iordana Aştefănoaei**, Ioan Dumitru, Ovidiu Caltun, Phenomenological study of thermal field generated by nanoparticles arrays in

hypertermia as treatment method, **Journal of Advanced Research in Physics** (2011), 2(1), 11110.

4. **Aștefănoaei Iordana**, Maftei Gheorghe, The behaviour of a test particle on a planar space-time structure, **Algebras Groups and Geometry(USA)**, 17(3), (2000).
5. **Aștefănoaei Iordana**, Maftei Gheorghe, On global properties of a cylindrical space-time structure, **Analele Universității de Vest**, Timișoara, 41, 11, (2000).
6. **Aștefănoaei Iordana**, Maftei Gheorghe, The primordial gravitational waves with cylindrical symmetries, **Romanian Astronomical Journal**, 8(2), 81 – 89, (1998).
7. **Aștefănoaei Iordana**, Maftei Gheorghe, Exact solutions for Einstein-Rosen Universe, **Romanian Astronomical Journal**, 1(9), 3-9, (1999).
8. Maftei Gheorghe, **Aștefănoaei Iordana**, PP gravitational waves with cylindrical symmetries, **Romanian Journal of Physics**, 45, 415-422, (2000).
9. **Aștefănoaei Iordana**, Maftei Gheorghe, Einstein-Rosen gravitational waves, **Romanian Journal of Physics**, (5-6), 120, (2000).
10. **Aștefănoaei Iordana**, The planar gravitational waves, **Analele Universității de Vest**, Timișoara, 41, pag 1-10,(2000).
11. Dariescu Marina – Aura, Dariescu Ciprian, **Aștefănoaei Iordana**, The globally pathologic properties of an exact class of solutions with “ $g_{44} = -\cos^2(\alpha z)$ ”, **Analele Universității din Timișoara**, Seria Științele Fizice, 39 (48), (1999).
12. **Aștefănoaei Iordana**, Dariescu Ciprian, Dariescu Marina – Aura, The large scale pathology in an exact class of solutions with  $\cosh(\alpha z)$ , **Algebras Groups and Geometry**, 16(1), 63-72 Palm Harbor, FL 34682, Hadronic Press Inc.(U.S.A), (1999).
13. **Aștefănoaei Iordana**, Maftei Gheorghe, On the solutions with cylindrical symmetries of the algebraic class N, **Analele Universității de Vest**, Timișoara, 40, 88, (1999).
14. **Aștefănoaei Iordana**, Maftei Gheorghe, Cylindrical gravitational waves, **Analele Universității de Vest**, Timișoara, 39, 55-64, (1999).
15. Dariescu Ciprian, Dariescu Marina-Aura, **Aștefănoaei Iordana**, The globally pathologic properties of an exact class of solutions with  $g_{44} = -\sinh^2(\alpha z)$ , **Analele Universității din Iași**, (ISSN 1453-

- 052X), Fizica Solidelor, Tomul XLIII-XLIV, fasc. 2, Editura Universității “Al. I. Cuza”, Iași, pag. 191-200, (1998).
16. **Aștefănoaei Iordana**, Maftei Gheorghe, Exact solutions for the gravitational waves with special symmetries, **Analele Universității din Iași**, (ISSN 1453-052X), Fizica Solidelor, Tomul XLIII-XLIV, fasc. 2, Editura Universității “Al. I. Cuza”, Iași, pag. 265-274, (1998).
17. Maftei Gheorghe, **Aștefănoaei Iordana**, Gravitational waves sources in Einstein – Rosen Universe, **UTFT 8-94 Jul. 1994**.
18. **Aștefănoaei Iordana**, Maftei Gheorghe, The interaction of a gravitational wave with a pure radiation field, **Proceedings the IV-rd and V-rd Conference of Theoretical Physics, General Relativity and Gravitation, Bistrița, may 1994 and may 1995**.
19. **Aștefănoaei Iordana**, Maftei Gheorghe, Exact solutions for Einstein-Rosen metric, Proceedings the III-rd Conference of Theoretical Physics, General Relativity and Gravitation, Bistrița, (1993), pag 28-34.
20. **Aștefănoaei I.**, Maftei Gh., „Gravitational waves in Einstein-Rosen Universe” UTFT 9-94, jul. 1994.
21. **Aștefănoaei Iordana**, Maftei Gheorghe, The primordial gravitational waves in Einstein-Rosen Universe, **Proceedings the I – rd and II – rd Conference of Theoretical Physics, General Relativity and Gravitation, Bistrița, may 1993**, pag 28-34.

## **E. Comunicări la Conferințe Internaționale**

### **Lucrări invited**

- [1]. **Iordana Astefanoaei**, Alexandru Stancu, “A Computational Study of the bioheat transfer in the Magnetic Hyperthermia – Cancer Therapy”, **COST ACTION CA 17115 “European network for advancing Electromagnetic hyperthermic medical technologies”**, 8 - 9 iulie 2019 Sibiu, România.
- [2]. **Iordana Astefanoaei**, Alexandru Stancu, “Magnetic Nanoparticle Dosimetry in Hyperthermia – Cancer Therapy. Thermo–Fluid Analysis”, IEEE Magnetics Society Chapter of the Romania Section Conference - **IEEE ROMSC 2019**, Iași, România.
- [3]. **Iordana Astefanoaei**, Alexandru Stancu, “A temperature analysis in the magnetic hyperthermia“, The 12 International Conference on Physics of Advanced Materials, **ICPAM-12**, 22-28 septembrie 2018, Heraklion, Greece.

[4]. **Iordana Astefanoaei**, Alexandru Stancu, "Hipertermia Magnetică. Câmpul termic al unor sisteme de nanoparticule. Aplicații“, A XLV-a Conferință Națională **FTEM 2018** – Fizica și Tehnologiile Educaționale Moderne, mai 2018, Iași, România.

[5]. **Iordana Astefanoaei**, Alexandru Stancu, "Magnetic Hyperthermia. The temperature field developed by the magnetic nanoparticle systems. Applications.“, IEEE Magnetics Society Chapter of the Romania Section Conference - **IEEE ROMSC 2018**, (iunie 2018), Iași (România).

[6]. **Iordana Aștefănoaei**, Ioan Dumitru, Alexandru Stancu, Horia Chiriac, "The magnetic Hyperthermia with low Curie temperature magnetic particles", **IEEE ROMSC 2017**, (iunie 2017), Iași (România).

[7]. **Iordana Aștefănoaei**, Alexandru Stancu, Horia Chiriac, "The temperature field in the Magnetic Hyperthermia with Fe – Cr – Nb – B magnetic particles", **IEEE ROMSC 2016**, 14 iunie. 2016, Iași (România).

[8]. **Iordana Aștefănoaei**, Ioan Dumitru, Alexandru Stancu, Horia Chiriac, "The magnetic Hyperthermia with low Curie temperature magnetic particles", **IEEE ROMSC 2014**, 13 iunie 2014, Iași (România).

[9]. **Iordana Aștefănoaei**, Ioan Dumitru, Alexandru Stancu, Horia Chiriac, "Thermal – fluid analysis in Magnetic Hyperthermia", **IEEE ROMSC 2013**, 2-3 sept. 2013, Iași (România).

### **Lucrări prezentate (oral/poster)**

[1]. **Iordana Astefanoaei**, Alexandru Stancu, "Magnetic Nanoparticle Dosimetry in Hyperthermia Therapy“, **TIM 19 Physics Conference**, 29-31 mai **2019**, Timișoara (România).

[2]. **Iordana Astefanoaei**, Alexandru Stancu, "Temperature field in the Magnetic Hyperthermia“, 2nd IEEE Conference on Advances in Magnetics, (**IEEE AIM 2018**), 4-7 februarie 2018, La Thuile, Italy.

[3]. **Iordana Astefanoaei**, Alexandru Stancu, "Advanced control of the temperature field in Magnetic Hyperthermia“, 62nd Annual Conference on Magnetism and Magnetic Materials (**MMM 2017**) November 6-9 Pittsburgh, PA, USA (2017).

[4]. **Iordana Astefanoaei** and Alexandru Stancu, "A temperature analysis in Magnetic Hyperthermia, **TIM 17 Physics Conference**, 26-29 mai **2017**, Timișoara, România.

[5]. **Iordana Aștefănoaei**, Alexandru Stancu, Horia Chiriac, "Magnetic Hyperthermia with Fe - Cr- Nb - B magnetic particles“, **TIM15-16 Physics Conference**, 26-28 mai **2016**, Timișoara.

[6]. **Iordana Aștefănoaei**, Horia Chiriac, Alexandru Stancu, Tissue temperature analysis in magnetic hyperthermia with Fe – Cr – Nb - B magnetic particles, 61<sup>st</sup> Annual Conference on Magnetism and Magnetic Materials (**2016 MMM Conference**), 31 oct. - 4 nov 2016, New Orleans (USA).

[7]. **Iordana Aștefănoaei**, Ioan Dumitru, Alexandru Stancu, Horia Chiriac, "The temperature analysis in the magnetic hyperthermia with low Curie temperature particles", 7th International Workshop on Amorphous and Nanostructured Magnetic Materials(**ANMM 2015**), 21-24 septembrie, Iași Romania.

[8]. **Iordana Aștefănoaei**, Ioan Dumitru, Alexandru Stancu, Horia Chiriac, "Study of the optimal thermal dose in the magnetic hyperthermia with low Curie temperature particles" (Th.P - P27), 20th International Conference on Magnetism (**ICM 2015**), 5-10 July 2015, Barcelona (Spania).

[9]. **Iordana Astefanoaei**, Ioan Dumitru, Alexandru Stancu, Laser heating and thermal stresses in the core-shell nanowires, 20th International Conference on Magnetism (**ICM 2015**), Barcelona, 2015, July 05, 2015.

[10]. Samir Taloub, Farida Hobar, **Iordana Astefanoaei**, Ioan Dumitru, Ovidiu Florin Caltun, Effect of Magnetic Nanoparticles distribution in tumoral cell for hyperthermia, The 8th International Conference On Advanced Materials, **ROCAM 2015**, Bucuresti, July 07, 2015.

[11]. Samir Taloub, Farida Hobar, **Iordana Astefanoaei**, Ioan Dumitru, Ovidiu Florin Caltun, Influence of shape and area hysteresis loops on heating process of magnetic nanoparticles for hyperthermia applications, Conference International Symposium on Hysteresis Modeling and Micromagnetics (**HMM 2015**), Iasi, May 18, 2015.

[12]. **Iordana Aștefănoaei**, Ioan Dumitru, Alexandru Stancu, Horia Chiriac, "Numerical study of dosimetry in magnetic hyperthermia with low Curie temperature particles"(EU-05), 59th Annual Conference on Magnetism and Magnetic Materials (**MMM 2014**), 3 - 7 Noiembrie 2014, Honolulu, (Hawaii).

[13]. **Iordana Aștefănoaei**, Ioan Dumitru, Alexandru Stancu, Horia Chiriac, "On the use of Low Curie Temperature Particles in Magnetic Hyperthermia"(HS-01), IEEE International Magnetics Conference (**INTERMAG**), 4 - 8 May **2014**, Dresden (Germany).

[14]. **Iordana Aștefănoaei**, Ioan Dumitru, Horia Chiriac, Alexandru Stancu, The Magnetic Hyperthermia with low Curie temperature magnetic particles (oral), **IEEE ROMSC XI**, Iasi, Romania, June 13, **2014**.

[15]. Ioan DUMITRU, **Iordana Astefanoaei**, Dorin Cimpoesu, Alexandru Stancu, Effective Anisotropy In Heated Magnetic Core-Shell Nanowires, International Conference on Physics of Advanced Materials (**ICPAM-10**), Iasi, Romania, September 22-28, **2014**.

[16]. **Iordana Aștefănoaei**, Ioan Dumitru, Alexandru Stancu, Horia Chiriac, "Controlling Temperature in Magnetic Hyperthermia with low Curie Temperature Particles" (EW-02), 58th Annual Conference on Magnetism and Magnetic Materials (**MMM**), 4 - 8 Noiembrie **2013**, Denver, Colorado (USA).

[17]. **Iordana Aștefănoaei**, Ioan Dumitru, Alexandru Stancu, Horia Chiriac, "Monitoring the thermal effects in the Magnetic Hyperthermia" (ID: 66), **IEEE e-Health and Bioengineering**, 21--23 noiembrie **2013**, Iași (România).

[18]. D'Arienzo M, Guerra A S, Loreti S, Pimpinella M, Quini M, Caporali C, Pagliari M, **Astefanoaei I**, Bolzan C, "Un campione primario in grafite per la misura della dose assorbita nella brachiterapia ad alto rateo di dose con sorgenti di  $^{192}\text{Ir}$ ", XXXVI Convegno Nazionale di Radioprotezione AIRP (Associazione Italiana di Radioprotezione) –18-20 settembre, 2013 Palermo.

[19]. Pinto M, Guerra A S, Loreti S, Pimpinella M, Quini M, Toni M P, **Astefanoaei I**, "Development of a new absorbed dose to water primary standard for kilovoltage radiotherapy beams", Poster Presentation, 8th AIFM Congress, 16-19 Nov 2013, Turin, Italy.

[20]. Pinto M, Pimpinella M, Guerra A S, **Astefanoaei I**, Loreti S, Quini M, Toni M P, "Development of a new in-water graphite calorimeter for the measurement of absorbed dose to water in medium x-ray beams", 16th International Congress of Metrology, 2013, <http://dx.doi.org/10.1051/metrology/201305009>.

[21]. **Iordana Astefanoaei**, Ioan Dumitru, Alexandru Stancu, Laser-induced thermal stresses in the magnetic nanowires, **COST MPO904 & IEEE ROMSC 2012**, Iasi, RO, poster.

[22]. **Astefanoaei Iordana**, Dumitru Ioan, Stancu Alexandru - Induced Thermal Stresses in Core Shell Magnetic Particles, **INTERMAG 2011**, Taipei.

[23]. **Astefanoaei Iordana**, Dumitru Ioan, Stancu Alexandru - The influence of thermal stresses on the magnetic properties of embedded particles into an alumina matrix, **ROMSC 2010**.

[24]. **Iordana Astefanoaei**, Ioan Dumitru, Alexandru Stancu, The thermal stresses in the hysteretic processes of the magnetic nanowires arrays, The 6th **IEEE ROMSC 2009**.

[25]. Ioan Dumitru, **Iordana Astefanoaei**, Alexandru Stancu - The energy eigenstates of two quantum dots systems placed at the air-semiconductor interface, **IEEE ROMSC 2008**.

[26]. **Iordana Astefanoaei**, Ioan Dumitru, Andrei Diaconu, Alexandru Stancu - The thermal stresses in co nanowires arrays, **IEEE ROMSC Conference 2008**.

[27]. **Iordana Astefanoaei**, Ioan Dumitru, Andrei Diaconu, Leonard Spinu, Alexandru Stancu, The temperature dependence of hysteretic processes in Co nanowires arrays, 52nd Annual Conference on Magnetism and Magnetic Materials – **MMM 2007**.

[28]. Veronica Goian, **Iordana Aștefănoaei**, Ioan Dumitru, Leonard Spinu, Alexandru Stancu, Temperature dependence of the Magnetostatic Interactions in Ferromagnetic nanowires systems, (CT-11), **10<sup>th</sup> Joint Magnetism and Magnetic Materials (MMM)/ Intermag Conference**, January 7-11, 2007, Baltimore, Maryland (SUA) – **Intermag 2007**.

[29]. **Iordana Astefanoaei**, Ioan Dumitru, Raimond Grimberg and Alexandru Stancu, The study of energy states of two cylindrical quantum dots placed at the interface semiconductor-air, **ICFPM 2007**.

[30]. Ioan Dumitru, **Iordana Astefanoaei**, Raimond Grimberg and Alexandru Stancu, Eigenstates of cylindrical quantum dots structures, **7<sup>th</sup> International Balkan Workshop on Applied Physics (IBWAP 2007**, 5-7<sup>th</sup> July, 2007), Constanta.

[31]. **Iordana Astefanoaei**, Horia Chiriac, Alexandru Stancu, Magnetic domains structure of dc Joule-heated amorphous glass-covered magnetic wires, **7<sup>th</sup> International Balkan Workshop on Applied Physics (IBWAP 2007**, 5-7<sup>th</sup> July, 2007), Constanta.

[32]. Veronica Goian, **Iordana Astefanoaei**, Ioan Dumitru, Alexandru Stancu, The influence of magnetostatic interactions on magnetic properties of nanowire lattices, **ROMSC 2007**, Iasi.

[33]. **Iordana Astefanoaei**, Ioan Dumitru, Raimond Grimberg and Alexandru Stancu, The energetic eigenstates of quantum dots systems, **ROMSC 2007**, Iasi.

[34]. **Iordana Astefanoaei** Horia Chiriac and Alexandru Stancu, The internal thermal stresses during the cooling process of a nanowire from alumina membrane, **The fourth edition IEEE ROMSC, Iasi, 26-30 may 2007**.

[35]. **Iordana Aștefănoaei**, Horia Chiriac and Alexandru Stancu, The thermal stresses induced in a Co nanowire from alumina membrane during the cooling process (E-028), Soft Magnetic Materials Conference (**SMM 18**), Cardiff, 2-5 September 2007.

[36]. **Iordana Astefanoaei**, Ioan Dumitru, Raimond Grimberg, Alexandru Stancu, The energetical states of quantum dots in the presence of a metallic layer (H-012), Joint European Magnetic Symposia (**JEMS 06**), San Sebastian, SPAIN 2006.

[37]. **Iordana Astefanoaei**, Horia Chiriac, Alexandru Stancu, Magnetic Anisotropy of Conventional Amorphous Wires (H-011), III Joint European Magnetic Symposia (**Jems 06**), 26-30 June, San Sebastian, Spain 2006.

[38]. **Iordana Astefanoaei**, Alexandru Stancu, Horia Chiriac, The effect of dc Joule-heating on magnetic structure of conventional amorphous wires (H-039), III Joint European Magnetic Symposia (**Jems 06**), 26-30 June, San Sebastian, Spain 2006.

[39]. **Iordana Astefanoaei**, Alexandru Stancu, The magnetic structure of conventional amorphous wires, **Training school on NMR, MRI,  $\mu$ SR and Mössbauer techniques**, September 17 – 30, **2006**, Universita' degli Studi di Pavia, Dipartimento di Fisica "A. Volta".

[40]. **Iordana Astefanoaei**, Alexandru Stancu, Horia Chiriac, Magnetic Domains Structure of Dc Joule-Heated conventional Amorphous (MM256), **6th European Magnetic Sensors & Actuators Conference**, Bilbao (Spain, July **2006**).

[41]. **Iordana Astefanoaei**, Alexandru Stancu, Horia Chiriac, Magnetic Domains Structure of Conventional Amorphous Wires (MM313), **6th European Magnetic Sensors & Actuators Conference**, Bilbao (Spain, July **2006**).

[42]. **Iordana Astefanoaei**, Ioan Dumitru, Raimond Grimberg, Alexandru Stancu, The Effect of a metallic layer of energetical states of quantum dots (MS272), **6th European Magnetic Sensors & Actuators Conference**, Bilbao (Spain, July **2006**).

[43]. Al XV-lea Simpoziom Annual al Aroend, 14 - 16 iunie, Mamaia, Romania **2006**.

[44]. **3rd International Workshop on Amorphous and Nanocomposite Magnetic Materials (ANMM 2005)**, September 19-21, Iasi, Romania.

[45]. **3rd International Workshop on Amorphous and Nanocomposite Magnetic Materials (ANMM 2005)**, September 19-21, Iasi, Romania.

[46]. One-day Seminar „**Magnetic Nanomaterials Preparation, Characterization & Applications**”, **September 27, Iasi, Romania, 2004**.

[47]. **Aștefănoaei Iordana**, Dariescu Ciprian, Dariescu Marina – Aura, On the cosmological universe described by the static globally pathologic planary exact solutions with  $g_{44} = -f^2(z)$ , **Seminarul Internațional de Geometrie Finsler și Lagrange**, Bacău, 16-20 february, 2000.

Data,

**14 februarie 2023**

**Semnătura,**  
**Conf. Dr. Iordana Aștefănoaei**