

Scientific and teaching publications

- A) Articles published in journal which are indexed in Web of Science and Scopus databases**
1. I.Hriana, I.Mălăescu, F.Claici, **C.N.Marin**, "The influence of particles concentration in ferrofluids on the broadening of the magnetic resonance line", J. Magn. Magn. Mater 201 no.1-3 (1999) 126-128.
 2. I.Mălăescu, **C.N.Marin**, "Deviation from the superparamagnetic behaviour of fine-particle systems", J. Magn. Magn. Mater 218 (2000) 91-96.
 3. **C.N.Marin**, I.Mălăescu, A.Ercuța, "The dependence of the effective anisotropy constant on particle concentration within ferrofluids, measured by magnetic resonance", J.Phys.D: Appl.Phys. 34, no.10 (2001) 1466-1469.
 4. I.Mălăescu, **C.N.Marin**, "Dependence on the temperature of the activation energy in the dielectric relaxation processes for ferrofluids in low-frequency field", J. Magn. Magn. Mater 252 (2002) 68-70.
 5. I.Mălăescu, **C.N.Marin**, "Dielectric behavior of some ferrofluids in low-frequency fields", Journal of Colloid and Interface Science 251 (2002) 73-77
 6. **C.N.Marin**, „The particle concentration effect on magnetic resonance linewidth for magnetic liquids with chain aggregates”, J. Magn. Magn. Mater. 250 (2002) 197-202.
 7. **C.N.Marin**, I.Mălăescu, V.Socoliu, „Study of the interparticle interaction effect on magnetic resonance line in ferrofluids”, Journal of Optoelectronics and Advanced Materials, 5 (2003) 227 - 231.
 8. P.C.Fannin, **C.N.Marin**, V.Socoliu, G.M.Istrătucă , A.T.Giannitsis, "The effect of colloidal stabilization upon ferrimagnetic resonance in magnetic fluids in the presence of a polarizing magnetic field", J.Phys.D: Appl.Phys., 36 (2003) 1227 – 1235.
 9. P.C.Fannin, **C.N.Marin**, I.Mălăescu, "The influence of particle concentration and polarizing field on the resonant behaviour of magnetic fluids", J. Phys.: Condensed Matter 15 (2003) 4739 - 4750.
 10. P.C.Fannin, **C.N.Marin**, V.Socoliu, G.M.Istratucă, "Investigation of particle agglomeration in unpolarised magnetic fluids by means of magnetic resonance measurements", J.Magn.Magn.Mater., 284C (2004) 104-112.
 11. P.C.Fannin, **C.N.Marin**, I.Mălăescu, A.T.Giannitsis, "Microwave absorption of composite magnetic fluids", J.Magn.Magn.Mater. 289 (2005) 78-80.
 12. P.C.Fannin, I.Mălăescu, **C.N.Marin**, "The effective anisotropy constant of particles within magnetic fluids as measured by magnetic resonance", J.Magn.Magn.Mater. 289 (2005) 162-164.
 13. I.Mălăescu, **C.N.Marin**, „Study of magnetic fluids by means of magnetic spectroscopy”, Physica B: Condensed Matter, 365 (2005) 134 – 140.
 14. P.C.Fannin, **C.N.Marin**, „Determination of the Landau-Lifshitz damping parameter by means of complex susceptibility measurements”, J. Magn. Magn. Mater., 299 (2006) 425 - 429.
 15. **C. N. Marin**, “Thermal and particle size distribution effects on the ferromagnetic resonance in magnetic fluids” J.Magn.Magn.Mater., 300 (2006) 397 - 406.
 16. P. C. Fannin, C. Mac Oireachtaigh, I. Malaescu, **C. N. Marin** “Investigation of magnetic fluids exhibiting field induced absorption peaks in the susceptibility spectra”, Journal of Optoelectronics and Advanced Materials, Vol. 8, No. 1, (2006), 46 – 49.
 17. P. C. Fannin, **C. N. Marin**, I. Malaescu, N. Stefu “Microwave dielectric properties of magnetite colloidal particles in magnetic fluids”, J. Phys.: Condensed Matter, 19 (2007) 036104-036111.
 18. P.C.Fannin, **C.N.Marin**, I. Malaescu, N.Stefu, “An investigation of the microscopic and macroscopic properties of magnetic fluids”, Physica B: Condensed Matter, 388 (2007) 87–92.
 19. P. C. Fannin, I. Malaescu, **C. N. Marin**, “Determination of the Landau-Lifshitz damping parameter of composite magnetic fluids”, Physica B: Condensed Matter, 388 (2007) 93–98.
 20. P. C. Fannin, **C. N. Marin**, C. Couper, “On the significance of the area under the after-effect function curve of a magnetic fluid”, J. Phys.: Condens. Matter **20** (2008) 204108 (4pp)
 21. P.C. Fannin, **C.N. Marin**, “Characteristic times of relaxation peaks of magnetic fluids”, J. Magn. Magn. Mater., **320** (2008) 2106–2111
 22. P.C. Fannin, I. Malaescu, **C.N. Marin**, N. Stefu, ”Microwave specific loss power of magnetic fluids subjected to a static magnetic field”, Eur. Phys. J. E 27 (2008) 145–148.

23. P.C.Fannin, I. Malaescu, **C. N. Marin**, N. Stefu, *Microwave propagation parameters in magnetic fluids*, The European Physical Journal E, **29** (3) 299-303 (2009)
24. P.C. Fannin, I. Malaescu, N. Stefu, **C. N. Marin**, „*Polarizing field and particle concentration dependence of the magnetic loss power in ferrofluids*”, AIP Conference Proceedings 1131 (2009) pp 81-85
25. P.C.Fannin, **C.N Marin**, C. Couper, , „***Investigation of magnetic fluids exhibiting field-induced increasing loss peaks***”, Journal of Magnetism and Magnetic Materials **322** (9-12) 1677-1681 (2010)
26. P.C.Fannin, **C.N. Marin**, C. Couper, , „***Precessional decay time of nanoparticles in magnetic fluids***”, Journal of Magnetism and Magnetic Materials **322** (9-12) 1682-1685 (2010)
27. Fannin, P.C., Stefu, N., **Marin, C.N.**, Malaescu, I., Totoreanu, R., „***Ferrofluid microwave devices with magnetically controlled impedances***”, AIP Conference Proceedings 1262 (2010) pp. 92-97
28. Serban, V.A., Malaescu, I., Ercuta, A., **Marin, C.N.**, Stefu, N., Opris, C., Codrean, C., Utu, D., „***Magnetic properties of the WC-Co cermet powders***”, AIP Conference Proceedings 1262 (2010) pp. 113-117
29. C. Couper, **C.N. Marin**, P.C. Fannin, “*Biasing field effect on the microwave dielectric properties of magnetic fluids*”, Physics Procedia, Volume 9 (2010) Pages 58-62
30. P. C. Fannin, **C. N. Marin**, C. Couper, I. Malaescu, N. Stefu, “*A Comparative Study of the Field Dependence of the Properties of Colloidal Suspensions of Nanoparticles and of Magnetic Microspheres*”, PIERS Proceedings, Xi'an, China (2010) March 22-26
31. P. C. Fannin, **C. N. Marin**, I. Malaescu, N. Stefu, P. Vlăzan, S. Novaconi, S. Popescu, “*Effect of the concentration of precursors on the microwave absorbent properties of Zn/Fe oxide nanopowders*”, Journal of Nanoparticle Research, **13** 311–319 (2011)
32. P.C. Fannin, **C. N. Marin**, I. Malaescu, N. Stefu, P. Vlazan, S. Novaconi, P. Sfirloaga, S. Popescu, C. Couper, “*Microwave absorbent properties of nanosized cobalt ferrite powders prepared by coprecipitation and subjected to different thermal treatments*”, Materials and Design **32** 1600–1604 (2011)
33. P.C. Fannin, **C. N. Marin**, C.Couper, “*The resonance decay function method in the determination of the pre-factor of the Néel relaxation time of single-domain nanoparticles*”, Journal of Magnetism and Magnetic Materials **323** (9-12) 1242-1245 (2011)
34. I. Malaescu, **C. N. Marin**, P. C. Fannin, N. Stefu, A. Savici, D. Malaescu, “*Comparative study of the microwave propagation parameters of some magnetic fluids in the presence of polarizing field*”, AIP Conference Proceedings 1387 (2011), pp. 208-212
35. P. C. Fannin, **C. N. Marin**, *The use of magnetic spectroscopy in the investigation of the magnetic viscosity of nanoparticles at microwave frequencies*, PIERS ONLINE, VOL. 7, NO. 6, 2011
36. **C. N. Marin**, P.C. Fannin, I. Mălaescu, P. Barvinschi, A. Ercuța, “*Intra-well relaxation process in magnetic fluids subjected to strong polarising fields*”, Journal of Magnetism and Magnetic Materials **324** (4) 434 - 439 (2012)
37. P.C. Fannin, **C. N. Marin**, K. Raj, C. Couper, P. Barvinschi, *An experimental study of the dynamic properties of nanoparticle colloids with identical magnetization but different particle size*, Journal of Magnetism and Magnetic Materials **324** 3443–3447 (2012)
38. **C. N. Marin**, I. Malaescu, A. Savici, *Investigation of the low frequency polarization mechanisms in magnetic fluids*, ACTA PHYSICA POLONICA A, Vol. **124**, No. 4, (2013) 724 – 727
39. **C. N. Marin**, P. C. Fannin, K. Raj, V. Socoliu, *Magneto-dielectric spectroscopy of magnetic fluids*, Magnetohydrodynamics, Vol. **49**, Issue 3-4 (2013) 270-276
40. M. Spunei, I. Malaescu, M. Mihai and **C. N. Marin**, *Absorbing materials with applications in radiotherapy and radioprotection*, Radiation Protection Dosimetry, 162 (1-2) (2014) 167-170, doi:10.1093/rpd/ncu252
41. **C. N. Marin**, I. Malaescu, P. C. Fannin, *Theoretical evaluation of the heating rate of ferrofluids*, Journal of Thermal Analysis and Calorimetry 119 issue 2 (2015) 1199-1203 DOI 10.1007/s10973-014-4224-2
42. A. Lungu, I. Malaescu, **C. N. Marin**, P. Vlăzan, P. Sfirloaga, *The electrical properties of manganese ferrite powders prepared by two different methods*, Physica B: Condensed Matter, 462 (2015) 80-85.

43. P. Sfirloaga, I. Miron, I. Malaescu, **C.N. Marin**, C. Ianasi, P. Vlazan, *Structural and physical properties of undoped and Ag-doped NaTaO₃ synthesized at low temperature*, Materials Science in Semiconductor Processing 39 (2015) 721-725
44. Gabriel Mihai Turi, **Cătălin Nicolae Marin**, and Marius Paulescu, *A review of the solar energy database for the Banat plain*, AIP Conference Proceedings 1694 (2015) 040010-1 (5pp); doi: 10.1063/1.4937262
45. Aurora Gajta, Daniela Turkoanje, Iosif Malaescu, **Catalin-Nicolae Marin**, Marie-Jeanne Koos, Biljana Jelicic, Vuk Milutinovic, *Dry eye syndrome among computer users*, AIP Conference Proceedings 1694 (2015) 040011-1 (5pp); doi: 10.1063/1.4937263
46. **C.N. Marin**, P.C. Fannin, I. Malaescu, *Time solved susceptibility spectra of magnetic fluids*, Journal of Magnetism and Magnetic Materials 388 (2015) 45-48
47. D. Malaescu, I. Grozescu, P. Sfirloaga, P. Vlazan, **C. N. Marin**, *The Electrical Properties of Some Composite Materials Based on Sodium and Tantalum Oxides*, Acta Physica Polonica A 129 (1) (2016) 133-137.
48. Q. Li, P. C. Fannin, **C. N. Marin**, I. Malaescu, K. Raj, *On the utility of low frequency, polarised, complex susceptibility measurements in the investigation of the dynamic properties of magnetic fluids*, Journal of Molecular Liquids, 219 (2016) 773-779.
49. I. Malaescu, A. Lungu, **C. N. Marin**, P. Vlazan, P. Sfirloaga, G. M. Turi, *Experimental investigations of the structural transformations induced by the heat treatment in manganese ferrite synthesized by ultrasonic assisted co-precipitation method*, Ceramics International, 42 (2016) 16744–16748
50. P. Sfirloaga, **C. N. Marin**, I. Malaescu, P. Vlazan, *The electrical performance of ceramics materials with perovskite structure doped with metallic ions*, Ceramics International, 42 (2016) 16744–16748
51. P. C. Fannin, L. Vekas, **C. N. Marin**, I. Malaescu, *On the determination of the dynamic properties of a transformer oil based ferrofluid in the frequency range 0.1–20 GHz*, Journal of Magnetism and Magnetic Materials, 423 (2017) 61-65
52. P.C. Fannin, **C.N. Marin**, I. Malaescu, K. Raj, C. Popoiu, “*Local arrangement of particles in magnetic fluids due to the measurement alternating field*”, Journal of Magnetism and Magnetic Materials, 438, (2017) 116-120
53. I. Malaescu, P. C. Fannin, **C. N. Marin**, D. Lazic, *The concept of ferrofluid preheating in the treatment of cancer by magnetic hyperthermia of tissues*, Medical Hypotheses 110 (2018) 76-79
54. I. Malaescu, A. Lungu, **C. N. Marin**, P. Sfirloaga, P. Vlazan, S. Brindusou, M. Poienar, *Temperature dependence of the dynamic electrical properties of Cu_{1+x}Mn_{1-x}O₂ (x=0 and 0.06) crednerite materials*, Ceramics International, 44 (10) (2018) 11610-11616
55. M. Stoia, C. Pacurariu, C. Mihali, I. Malaescu, **C. N. Marin**, A. Capraru, *Manganese ferrite-polyaniline hybrid materials: Electrical and magnetic properties*, Ceramics International, 45 (2019) 2725-2735.
56. D. Lazic, P. C. Fannin, P. Sfirloaga, P. Barvinschi, I. Malaescu, V. Socoliu, **C. N. Marin**, *Influence of the size of particles on the magnetic heating of a mixed ferrite*, AIP Conference Proceedings, 2071, 040012 (2019); <https://doi.org/10.1063/1.5090079>
57. S. Brindusou, M. Poienar, **C. N. Marin**, P. Sfirloaga, P. Vlazan, I. Malaescu, *The electrical conductivity of Fe₃(PO₄)₂·8H₂O materials*, J Mater Sci: Mater Electron 30, 15693–15699 (2019) doi:10.1007/s10854-019-01952-3
58. P. Sfirloaga, I. Malaescu, **C. N. Marin**, P. Vlazan, *The effect of partial substitution of Pd in LaMnO₃ polycrystalline materials synthesized by sol-gel technique on the electrical performance*, J Sol-Gel Sci Technol (2019) 92: 537-545. <https://doi.org/10.1007/s10971-019-05102-3>
59. G. Matu, **C. N. Marin**, I. Malaescu, *Frequency and temperature analysis of the clausius-mossotti factor of a kerosene-based ferrofluid in low frequency field*, Journal of Ovonic Research, 16, Issue 2 (2020) 89-96.
60. O. M. Bunoiu, G. Matu, **C. N. Marin**, I. Malaescu, *Investigation of some thermal parameters of ferrofluids in the presence of a static magnetic field*, J. Magn. Magn. Mater., 498 (2020), Article number 166132.
61. D. Lazic, I. Malaescu, O. M. Bunoiu, I. Marin, F. G. Popescu, V. Socoliu, **C. N. Marin**, *Investigation of therapeutic-like irradiation effect on magnetic hyperthermia characteristics of a water-based ferrofluid with magnetite particles*, J. Magn. Magn. Mater., 502 (2020) Article number 166605

62. E. Anitas, I. Bica, M. Bunoiu, I. Malaescu, **C. N. Marin**, A. Ercuta, M. Balasoiu, M. Lungu, G. Pascu, *Magneto-optical transmittance observed in magnetorheological suspensions films*, AIP Conference Proceedings, **2218** (2020) Article number 030016
63. S. Brindusoiu, P. Sfirloaga, P. Vazan, P. C. Fannin, I. Malaescu, **C. N. Marin**, *The electrical conductivity of giniite Fe₅(PO₄)₄(OH)₃·2H₂O materials*, AIP Conference Proceedings, **2218** (2020) Article number 030017
64. P. Sfirloaga, I. Malaescu, **C. N. Marin**, M. Poienar, P. Vlazan, *Effect of Fe-doping on the structural, morphological and electrical properties of LaMnO₃*, AIP Conference Proceedings, **2218** (2020) Article number 040003
65. B. Ilie, M. Spunei, I. Malaescu, **C. N. Marin**, *The stability of silicone based bolus before and after a radiotherapy treatment*, AIP Conference Proceedings, **2218** (2020) Article number 030018.
66. D. Susan-Resiga, I. Malaescu, O. Marinica, **C. N. Marin**, *Magnetorheological properties of a kerosene-based ferrofluid with magnetite particles hydrophobized in the absence of the dispersion medium*, Physica B: Condensed Matter, **587** (2020) Article number 412150
67. P. Sfirloaga, G. Vlase, T. Vlase, I. Malaescu, **C. N. Marin**, P. Vlazan, *Silver doping in lanthanum manganite materials: structural and electrical properties*, Journal of Thermal Analysis and Calorimetry, **142** (2020) 1817 – 1823 DOI: 10.1007/s10973-020-10095-1
68. C. Zaharia, V. F. Duma, C. Sinescu, V. Socoliuc, I. Craciunescu, R. P. Turcu, **C. N. Marin**, A. Tudor, M. Rominu, M. L. Negruțiu, Meda, *Dental Adhesive Interfaces Reinforced with Magnetic Nanoparticles: Evaluation and Modeling with Micro-CT versus Optical Microscopy*, Materials, **13** (18) (2020) Article Number: 3908, DOI: 10.3390/ma13183908
69. **C. N. Marin**, I. Malaescu, *Experimental and theoretical investigations on thermal conductivity of a ferrofluid under the influence of magnetic field*, EUROPEAN PHYSICAL JOURNAL E, **43** Issue: 9 (2020) Article Number: 61
70. **C. N. Marin**, P. C. Fannin, I. Malaescu, G. Matu, *Macroscopic and microscopic electrical properties of a ferrofluid in a low frequency field*, PHYSICS LETTERS A, **384** Issue: 30 (2020) Article Number: 126786
71. V. Socoliuc, **C. N. Marin**, *The effect of long time exposure to light of a water-based ferrofluid on its low frequency complex magnetic permeability*, J. Magn. Magn. Mater., **523** (2021) 167635
72. B. Ilie, I. Malaescu, **C. N. Marin**, I. Marin, M. Spunei, S. Negru, *Dosimetric investigations of some composites consisting of metallic particles distributed in silicone rubber matrix*, Journal of Ovonic Research, **17**, Issue 2 (2021) 217 - 223
73. **C. N. Marin**, I. Malaescu, P. Sfirloaga, A. Teusdea, *Electric and magnetic properties of a composite consisting of silicone rubber and ferrofluid*, Journal of Industrial and Engineering Chemistry, **101** (2021) 405-413 DOI10.1016/j.jiec.2021.05.042
74. P. C. Fannin, O. M. Bunoiu, I. Malaescu, **C. N. Marin**, D. Ursu, *Magnetically tuning microwave propagation parameters in ferrofluids*, The European Physical Journal E, **44**, Issue 6 (2021) Article number 83
75. Adina-Elena Segneanu, **Catalin Nicolae Marin**, Ioan Ovidiu-Florin Ghirlea, Catalin Vladut Ionut Feier, Cornelia Muntean and Ioan Grozescu, *Artemisia annua Growing Wild in Romania—A Metabolite Profile Approach to Target a Drug Delivery System Based on Magnetite Nanoparticle*, Plants 2021, **10**, 2245. DOI: 10.3390/plants10112245
76. A. Teusdea, P. C. Fannin, I. Malaescu, **C. N. Marin**, *The effect of a polarizing magnetic field on the dynamic properties and the specific absorption rate of a ferrofluid in the microwave range*, Soft Materials, 2022, **20** (S1) DOI 10.1080/1539445X.2021.1974475
77. A. Teusdea, I. Malaescu, P. Sfirloaga, **C. N. Marin**, *Electric and Dielectric Properties in Low-Frequency Fields of Composites Consisting of Silicone Rubber and Al Particles for Flexible Electronic Devices*, Materials **15** (2022) 2309 DOI 10.3390/ma15062309
78. I. Marin, M. Iurciuc, F. G. Popescu, S. Iurciuc, C. M. Popoiu, **C. N. Marin**, S. Ursoniu, C. Fira-Mladinescu, *Pulse Wave Velocity, a Predictor of Major Adverse Cardiovascular Events, and Its Correlation with the General Stress Level of Health Care Workers during the COVID-19 Pandemic*, Medicina **58** (2022) 704 DOI 10.3390/medicina58060704
79. A. E. Segneanu, **C. N. Marin**, D. D. Herea, I. Stanusoiu, C. Muntean, I. Grozescu, *Romanian Viscum album L.—Untargeted Low-Molecular Metabolomic Approach to Engineered Viscum-AuNPs Carrier Assembly*, Plants **11** (2022) 1820 DOI 10.3390/plants11141820

80. C. Casut, I. Malaescu, **C. N. Marin**, M. Miclau, *The Effect of Bi₂O₃ and Fe₂O₃ Impurity Phases in BiFeO₃ Perovskite Materials on Some Electrical Properties in the Low-Frequency Field*, Materials **15** (2022) 4764 DOI 10.3390/ma15144764
81. I. Marin, F. G. Popescu, A. E. Pauncu, A. Apostol, V. M. Ivan, C. N. Marin, O. Fira-Mladinescu, S. Ursoniu, *A Heart Rate Step Function Response Method for the Evaluation of Pulse Wave Velocity as a Predictor of Major Adverse Cardio-Vascular Events*, Medicina **58** (2022) 1633 DOI 10.3390/medicina58111633
82. A. E. Segneanu, **C. N. Marin**, G. Vlase, C. Cepan, M. Mihailescu, C. Muntean, I. Grozescu, *Highly efficient engineered waste eggshell-fly ash for cadmium removal from aqueous solution*, Scientific Reports, **12** (2022) 9676 DOI 10.1038/s41598-022-13664-6
83. Malaescu I., Bunoiu M.O., Teusdea A., **Marin C.N.**, *Investigations on the electrical conductivity and complex dielectric permittivity of a ferrofluid subjected to the action of a polarizing magnetic field*, (2023) Materials Research Bulletin, 164, art. no. 112281, <https://doi.org/10.1016/j.materresbull.2023.112281>
84. Marin, C.N.; Malaescu, I. *The Effect of Magnetically Induced Local Structure and Volume Fraction on the Electromagnetic Properties of Elastomer Samples with Ferrofluid Droplet Inserts*. Magnetochemistry 2024, 10, 4. <https://doi.org/10.3390/magnetochemistry10010004>
85. Marin, I.; Fira-Mladinescu, C.; **Marin, C.N.**; Stan, V.; Ursoniu, S. *An Analysis of Burnout, Coping, and Pulse Wave Velocity in Relation to the Workplace of Healthcare Workers for the Sustainability of the Medical Career*. Sustainability 2024, 16, 997. <https://doi.org/10.3390/su16030997>
86. Malaescu, I.; **Marin, C.N.**; Fannin, P.C. *Experimental Investigations on the Ferromagnetic Resonance and Absorbing Properties of a Ferrofluid in the Microwave Range*. Magnetochemistry 2024, 10, 7. <https://doi.org/10.3390/magnetochemistry10020007>
87. Vlazan, P.; **Marin, C.N.**; Malaescu, I.; Vlase, G.; Vlase, T.; Poienar, M.; Sfirloaga, P. *Revealing the Impact of Ga and Y Doping on Thermal and Electrical Behavior of LaMnO₃ Ceramic Materials*. Appl. Sci. 2024, 14, 1546. <https://doi.org/10.3390/app14041546>
88. Paulina Vlazan, Maria Poienar, Iosif Malaescu, **Catalin N. Marin**, Cristian Casut, Paula Sfirloaga, Exploiting the Bi-doping effect on the properties of NaNbO₃ perovskite -type materials, Chemical Physics, Volume 579, 2024, 112203, <https://doi.org/10.1016/j.chemphys.2024.112203>.
89. Malaescu, I.; Sfirloaga, P.; **Marin, C.N.**; Bunoiu, M.O.; Vlazan, P. *Experimental Investigations on the Electrical Conductivity and Complex Dielectric Permittivity of ZnxMn1-xFe2O4 (x = 0 and 0.4) Ferrites in a Low-Frequency Field*. Crystals 2024, 14, 437. <https://doi.org/10.3390/cryst14050437>
90. Malaescu, I.; Sfirloaga, P.; **Marin, C.N.** *Experimental Investigations of the AC-Conductivity in NaTaO₃ Ceramic Materials Doped with Cu and Al Metal Ions*. Metals 2024, 14, 793. <https://doi.org/10.3390/met14070793>

B) Articles published in journals which are no indexed in Web of Science or Scopus databases

1. I.Bica, **C.N.Marin**, “An experimental study of anodic spot diameter”, Analele Universității de Vest din Timișoara, seria Științe Fizice, vol. XXXI (1994) 39-43.
2. **C.N.Marin**, I.Mălăescu, “Experimental study of dielectric loss in magnetite-kerosene ferrofluids”, Analele Universității de Vest din Timișoara, seria Științe Fizice, vol. XXXIV (1996) 62-67.
3. I.Hriana, I.Mălăescu, **C.N.Marin**, N.Ştefu, “Magnetic relaxation processes in radiofrequency field for dispersed monodomenic particles”, Analele Universității de Vest din Timișoara, seria Științe Fizice, vol. XXXVI (1997) 17 – 28.
4. I.Mălăescu, L.Gabor, **C.N.Marin**, “Ferrimagnetic resonance of the ferrofluids filtered in magnetic field”, Analele Universității de Vest din Timișoara, seria Științe Fizice, vol. XXXXIII (2002) 96 – 102.
5. I. Malaescu, **C. N. Marin** Magnetic spectroscopy in study of magnetic fluids, Annals of University of Petrosani, Physics, 6 (2004) 69-78
6. I. Malaescu, P. C. Fannin, **C. N. Marin**, Determination of the anisotropy constant of nanoparticles by means of magnetic resonance measurements Analele Universitatii de Vest din Timisoara, vol.XLV (2004) 51-57
7. I. Malaescu, L. Gabor, **C. N. Marin**, N. Stefu, Contribution to the obtaining and the characterization of some magnetic fluids, Analele Universitatii de Vest din Timisoara, vol.XLV (2004) 143-148
8. **C. N. Marin**, N. Stefu, The effect of dipolar interactions on the magnetization reversal of individual

- grains in perpendicular recording media*, Analele Universitatii de Vest din Timisoara, vol.XLV (2004) 148-153
9. **C. N. Marin**, I. Malaescu, *The influence of particle agglomerations on the effective anisotropy constant of particles within magnetic fluids as studied by magnetic resonance*, Rom. Journ. Phys., vol.50, nos. 7-8, (2005) 789-797.
 10. I. Malaescu, P.C.Fannin, **C.N.Marin**, *On the ratio between the maximum absorption frequency and the resonance frequency of composite magnetic fluids*, Analele Universitatii de Vest din Timisoara, Seria Fizica, vol. 46 (2005) 157-162
 11. N. Stefu, P.C.Fannin, I. Malaescu, **C.N.Marin**, *Study on the dielectric properties of the ferrofluids in high frequency field*, Analele Universitatii de Vest din Timisoara, Seria Fizica, vol. 47 (2005) 35-41
 12. I. Bica, **C. N. Marin**, Gh. Catana, G. Buse, *Bubble formation in the wall of iron micro-spheres*, Analele Universitatii de Vest din Timisoara, Seria Fizica, vol. 47 (2005) 95-99
 13. I. Malaescu, **C.N.Marin**, A. Lucaci, E. Preda, I. Nicoara, *Determination of the particle concentration in diluted magnetic fluids using FT-IR spectrometry*, Analele Universitatii de Vest din Timisoara, Seria Fizica, vol. 46 (2005) 120-124
 14. P. C. Fannin, I. Malaescu, N. Stefu, **C. N. Marin**, *On the frequency and magnetic polarizing field dependence of the complex dielectric permittivity of magnetic fluids in the microwave range*, Analele Universitatii de Vest din Timisoara, Seria Fizica, vol. 49 (2006) 93-96
 15. M. Poienar, **C. N. Marin**, *Investigation of micro-structural properties of magnetic fluids by means of the dilution series method*, Analele Universitatii de Vest din Timisoara, Seria Fizica, vol. 49 (2006) 140-143
 16. I. Bica, I. Malaescu, **C.N.Marin**, B. Vatzulik, A. Pacurar, Oana Andrei, *Cavitational iron microparticles generation by plasma procedures*, Analele Universitatii de Vest din Timisoara, Seria Fizica, vol. 50 (2007) 29-38
 17. P. C. Fannin, **C. N. Marin**, I. Malaescu, N. Stefu, *Microwave loss power in composite magnetic fluids*, Analele Universitatii de Vest din Timisoara, Seria Fizica, vol. 52 (2008) 51-55
 18. I. Malaescu, P. C. Fannin, **C. N. Marin**, N. Stefu, *Magnetic and dielectric behaviour of magnetic fluids in electromagnetic field*, STUDIA UNIVERSITATIS BABEŞ-BOLYAI, PHYSICA, LV, 1 (2010) 73-83
 19. Dan Malaescu, Ioan Grozescu, Paula Sfirloaga, Paulina Vlazan, **Catalin N Marin**, *Electric Properties of NaTaO₃ Obtained by Hydothermal Method*, Annals of the West University of Timisoara. Physics Series, 58 (2015) 48
 20. I. Malaescu, **C. N. Marin**, M. Bunoiu, P. C. Fannin, N. Stefu, L. Iordaconiu, *The effect of particle concentration on the heating rate of ferrofluids for magnetic hyperthermia*, Analele Universitatii de Vest din Timisoara, Seria Fizica, LVIII, 2015, 81 - 88, DOI: 10.1515/awutp-2015-0210
 21. I. Malaescu, **C. N. Marin**, Marius Spunei, *Comparative Study on the Surface Dose of Some Bolus Materials*, International Journal of Medical Physics, Clinical Engineering and Radiation Oncology, 4 (2015) 348-352
 22. I Malaescu, A Lungu, **CN Marin**, P Vlazan, P Sfirloaga, *Complex impedance of manganese ferrite powders obtained by two different methods*, Annals of the West University of Timisoara. Physics Series 58 (2015) 14
 23. I Malaescu, **CN Marin**, M Spunei, *Comparative Study on the Surface Dose of Some Bolus Materials*, International Journal of Medical Physics, Clinical Engineering and Radiation Oncology, 4 (2015) 348-352

C) Contributions in conferences

1. I.Hriana, I.Mălăescu, F.Claici, **C.N.Marin**, “Complex permeability of polymer composite ferrites”, A 5-a Conferință de Materiale Magnetice și Supraconductoroare, Cluj-Napoca, 12-13 septembrie 1996.
2. I.Hriana, **C.N.Marin**, I.Mălăescu, “Low frequency dielectric relaxation in a magnetite-kerosene ferrofluid”, 3rd General Conference of the Balkan Physics Union, Cluj-Napoca, 2-5 septembrie 1997.

3. I.Hrianca, I.Mălăescu, **C.N.Marin**, N.Ştefu, "Magnetic relaxation processes in radiofrequency field for dispersed monodomenic particles", Sesiunea Anuală de Comunicări Științifice a Universității din Oradea 1997.
4. I.Hrianca, I.Mălăescu, F.Claici, **C.N.Marin**, "The influence of particles concentration in ferrofluids on the broadening of the magnetic resonance line", 8th International Conference on Magnetic Fluids, Timișoara, 29 iunie – 3 iulie, 1998.
5. I.Mălăescu, **C.N.Marin**, "Dependence on the temperature of the activation energy in the dielectric relaxation processes for ferrofluids in low-frequency field", 9th International Conference on Magnetic Fluids, Bremen, Germania, 23-27 iulie, 2001.
6. **C.N.Marin**, I.Mălăescu, "The dilution effect on the effective anisotropy constant of the colloidal particles from ferrofluids, measured by magnetic resonance", 9th International Conference on Magnetic Fluids, Bremen, Germania, 23-27 iulie, 2001.
7. I.Mălăescu, L.Gabor, **C.N.Marin**, "Ferrimagnetic resonance of the ferrofluids filtered in magnetic field", Sesiunea Anuală de Comunicări Științifice a Facultății de Fizică a Universității de Vest, Timișoara, 23-24 noiembrie 2001.
8. **C.N.Marin**, I.Mălăescu, V.Socoliu, „Study of the interparticle interaction effect on magnetic resonance line in ferrofluids”, International Conference on Advanced Materials and Structures, (AMS 2002), Timișoara, 19-20 septembrie 2002.
9. P.C.Fannin, I.Mălăescu, **C.N.Marin**, "On the effective anisotropy constant of particles within ferrofluids as measured by magnetic resonance", Sesiunea Anuală de Comunicări Științifice a Facultății de Fizică a Universității de Vest, cu Participare Internațională, Timișoara, 29-30 noiembrie 2002.
10. **C.N.Marin**, "Magnetic resonance within magnetic liquids with chain-like particle agglomerations", Sesiunea Anuală de Comunicări Științifice a Facultății de Fizică a Universității de Vest, cu Participare Internațională, Timișoara, 29-30 noiembrie 2002.
11. **C.N.Marin**, "High speed switching of magnetization in magnetic field pulses", Sesiunea Anuală de Comunicări Științifice a Facultății de Fizică a Universității de Vest, cu Participare Internațională, Timișoara, 29-30 noiembrie 2002.
12. P.C.Fannin, I.Mălăescu, **C.N.Marin**, "On the effective anisotropy field of particles within composite magnetic fluids", Sesiunea Anuală de Comunicări Științifice a Facultății de Fizică a Universității de Vest, cu Participare Internațională, Timișoara, 28-29 noiembrie 2003.
13. I.Mălăescu, **C.N.Marin**, "Magnetic relaxation spectroscopy for colloidal stabilization analysis of magnetic fluids in zero polarizing fields", Sesiunea Anuală de Comunicări Științifice a Facultății de Fizică a Universității de Vest, cu Participare Internațională, Timișoara, 28-29 noiembrie 2003.
14. I.Mălăescu, **C.N.Marin**, „The influence of particle agglomerations on the effective anisotropy constant of particles within magnetic fluids as measured by magnetic resonance,“ 5th International Balkan Workshop on Applied Physics, 5-7 iulie 2004
15. P.C.Fannin, **C.N.Marin**, I.Mălăescu, A.T.Giannitsis, "Microwave absorption of composite magnetic fluids", 10th International Conference on Magnetic Fluids, Guaruja, Sao Paulo, Brazilia, 2-6 august, 2004.
16. P.C.Fannin, I.Mălăescu, **C.N.Marin**, "The effective anisotropy constant of particles within magnetic fluids as measured by magnetic resonance", 10th International Conference on Magnetic Fluids, Guaruja, Sao Paulo, Brazilia, 2-6 august, 2004.
17. I. Malaescu, **C. N. Marin**, Magnetic spectroscopy in study of magnetic fluids Annual Physics Conference Petrosani, 13-14 May 2004 .
18. **C. N. Marin** Thermal and particle size distribution effects on the ferromagnetic resonance in magnetic fluids, Physics Conference TIM-04, Timișoara, November 26th – 27th, 2004
19. I. Malaescu, P. C. Fannin, **C. N. Marin** Determination of the anisotropy constant of nanoparticles by means of magnetic resonance measurements, Physics Conference TIM-04, Timișoara, November 26th – 27th, 2004
20. P. C. Fannin, I. Malaescu , **C. N. Marin**, Magnetic relaxation and ferromagnetic resonance in magnetic fluids, 6th International Balkan Workshop on Applied Physics, July 5-7, 2005, Constanta, Romania (**Invited lecture**)
21. P. C. Fannin, C. Mac Oireachtaigh, I. Malaescu , **C. N. Marin**, Investigation of magnetic fluids exhibiting field induced absorption peaks in the susceptibility spectra, 6th International Balkan Workshop on Applied Physics, July 5-7, 2005, Constanta, Romania (**Invited lecture**)

22. I. Malaescu, P. C. Fannin, **C. N. Marin** *On the ratio between the maximum absorption frequency and the resonance frequency of composite magnetic fluids* Physics Conference TIM-05, Timișoara, November 26th – 27th, 2005
23. I. Bica, **C. N. Marin**, Gh. Catana, G. Bușe, *Bubble formation in the wall of iron micro-spheres*, Physics Conference TIM-05, Timișoara, November 26th – 27th, 2005
24. I. Malaescu, **C. N. Marin**, A. Lucaci, E. Preda and I. Nicoara, *Determination of particle concentration in diluted magnetic fluids by means of FT-IR spectrometry*, Physics Conference TIM-05, Timișoara, November 26th – 27th, 2005
25. N. Ștefu, P. C. Fannin, I. Malaescu, **C. N. Marin**, *Study on the dielectric properties of the ferrofluids in high frequency field*, Physics Conference TIM-05, Timișoara, November 26th – 27th, 2005
26. I. Malaescu , **C. N. Marin**, P. C. Fannin, *Investigation of the dynamic properties of magnetic fluids using the ferromagnetic resonance*, 7th International Balkan Workshop on Applied Physics, July 5-7, 2006, Constanța, Romania (**Invited lecture**)
27. P.C.Fannin, I. Malaescu, **C.N.Marin**, N. Stefu, *Power dissipation in magnetic fluids in microwave range*, Physics Conference Tim-06, Timisoara, November 24th- 25th, 2006.
28. P.C.Fannin, I. Malaescu, N. Stefu, **C.N.Marin**, *Dependence on the frequency and magnetic polarizing field of the complex dielectric permittivity of the magnetic fluids in microwave range*, Physics Conference Tim-06, Timisoara, November 24th- 25th, 2006.
29. P.C.Fannin, **C.N.Marin**, I. Malaescu, N. Stefu, *The effect of the polarizing magnetic field and of the partial immobilization of particles on the loss power in magnetic fluids*, Physics Conference Tim-06, Timisoara, November 24th- 25th, 2006.
30. Maria Poienar, **C. N. Marin**, *Investigation of micro-structural properties of magnetic fluids by means of dilution series method*, Physics Conference Tim-06, Timisoara, November 24th- 25th, 2006.
31. I. Malaescu, P.C.Fannin, **C.N.Marin**, N.Stefu, *Magnetic and dielectric behaviour of magnetic fluids in electromagnetic field*, National Conference on Applied Physics, December 8-9 2006, Iasi, Romania (**Invited lecture**)
32. Malaescu, P.C.Fannin, **C.N.Marin**, N.Stefu, *A study of magnetic fluid hyperthermia with application to the cancer treatment*, National Conference on Applied Physics, December 8-9 2006, Iasi, Romania
33. P. C. Fannin, **C. N. Marin**, C. Couper, *On the significance of the area under the after-effect function of a magnetic fluid*, 11th International Conference on Magnetic Fluids, Kosice, Slovakia, July 23 – 27, 2007.
34. **C. N. Marin**, P. C. Fannin, *Characteristic times of relaxation peaks of magnetic fluids*, in the workshop LOCAL DISORDER AT NANOSCALE, in the frame of the conference ISOTOPIC AND MOLECULAR PROCESSES, September 20-22, 2007, Cluj – Napoca, Romania
35. P. C. Fannin, I. Malaescu, **C. N. Marin**, N. Stefu, *Frequency and field dependence of the electromagnetic field propagation constants in magnetic fluids in the GHz range*, Physics Conference Tim-07, Timisoara, November 23rd- 24th, 2007.
36. P. C. Fannin, I. Malaescu, **C. N. Marin**, N. Stefu, *Specific loss power in magnetic fluids in microwave range*, Physics Conference Tim-07, Timisoara, November 23rd- 24th, 2007.
37. P. C. Fannin, **C. N. Marin** , I. Malaescu, *The spectroscopic splitting factor of nanoparticles in magnetic fluids*, Physics Conference Tim-07, Timisoara, November 23rd- 24th, 2007.
38. P. C. Fannin, **C. N. Marin**, I. Malaescu, *A comparative study of the field dependence of the properties of colloidal suspensions of nanoparticles and of magnetic spheres*, 9th International Balkan Workshop on Applied Physics, Constanța, Romania, July 7-9, 2008, ora 15.30-16.00, 7 iulie 2008 (**Invited lecture**)
39. P. C. Fannin, I. Malaescu, N. Stefu, **C. N. Marin**, *Polarizing field and particle concentration dependence of the magnetic loss power in ferrofluids*, Physics Conference Tim-08, Timișoara, November 28th- 29th, 2008.
40. P. C. Fannin, **C. N. Marin**, I. Malaescu, N. Stefu, *Microwave loss power in composite magnetic fluids*, Physics Conference Tim-08, Timișoara, November 28th- 29th, 2008.
41. P. C. Fannin, I. Malaescu, **C. N. Marin**, N. Stefu, *Frequency and field dependence of the refractive index of magnetic fluids in microwave range*, Physics Conference Tim-08, Timișoara, November 28th- 29th, 2008.
42. P. C. Fannin, **C. N. Marin**, I. Malaescu, *Determination of spectroscopic splitting factor of ferromagnetic nanoparticles in magnetic fluids*, 9th International Balkan Workshop on Applied

- Physics, Constanta, Romania, July 7-9, 2008, ora 15.30-16.00, 7 iulie 2008
43. P. C. Fannin, **C. N. Marin**, C. Couper, "Precessional decay time of nanoparticles in magnetic fluids", Joint European Magnetic Symposia, September 14-19, 2008, Dublin, Ireland.
 44. P. C. Fannin, **C. N. Marin**, C. Couper, "Investigation of magnetic fluids exhibiting field induced increasing loss peaks", Joint European Magnetic Symposia, September 14-19, 2008, Dublin, Ireland.
 45. P.C. Fannin, I. Malaescu, **C. N. Marin**, C. Couper, N. Stefu, *On the utility of high-frequency measurements of magnetic fluids*, 10th international Balkan Workshop on Applied Physics, July 6-8, 2009, Constanta (**Invited lecture**)
 46. P.C. Fannin, **C. N. Marin**, I. Malaescu, N. Stefu, *Low frequency magnetic loss power in magnetic fluids*, 10th international Balkan Workshop on Applied Physics, July 6-8, 2009
 47. I. Malaescu, **C. N. Marin**, N. Stefu, P.C. Fannin, *Study of microwave propagation parameters in magnetic fluids*, 10th international Balkan Workshop on Applied Physics, July 6-8, 2009, Constanta
 48. I. Malaescu, **C. N. Marin**, N. Stefu, P. C. Fannin, *Tunable attenuation and reflection of microwaves in magnetic fluids*, Physics Conference TIM-09, November 27-28, 2009, Timisoara
 49. P. C. Fannin, N. Stefu, **C. N. Marin**, I. Malaescu, R. Totoreanu, *Ferrofluid microwave devices with magnetically controlled impedances*, Physics Conference TIM-09, November 27-28, 2009, Timisoara
 50. P. C. Fannin, I. Malaescu, R. Totoreanu, N. Stefu, **C. N. Marin**, *The effect of the polarizing field on the microwave propagation parameters in ferrofluids*, Physics Conference TIM-09, November 27-28, 2009, Timisoara
 51. P. C. Fannin, **C. N. Marin**, I. Malaescu, N. Stefu, Paulina Vlazan, Stefan Novaconi, Paula Sfirloaga, Simona Popescu, *Microwave absorbent properties of cobalt ferrite nanopowders obtained by the hydrothermal and coprecipitation methods*, Physics Conference TIM-09, November 27-28, 2009, Timisoara
 52. P. C. Fannin, **C. N. Marin**, I. Malaescu, N. Stefu, Stefan Novaconi, Paulina Vlazan, Mihaela Vasile, Simona Popescu, *Precursor's concentration effect on the microwave magnetic properties of oxidic compounds with Zn-ferrite*, Physics Conference TIM-09, November 27-28, 2009, Timisoara
 53. V. A. Serban, I. Malaescu, A. Ercuta, **C. N. Marin**, C. Opris, C. Codreanu, D. Utu, *Magnetic properties of the WC-Co cermet systems*, Physics Conference TIM-09, November 27-28, 2009, Timisoara
 54. P. C. Fannin, **C. N. Marin**, C. Couper, I. Malaescu, N. Stefu, *A Comparative Study of the Field Dependence of the Properties of Colloidal Suspensions of Nanoparticles and of Magnetic Microspheres*, **Progress In Electromagnetics Research Symposium , Xi'an, CHINA, 22-26 March, 2010**
 55. P.C. Fannin, **C.N. Marin**, C. Couper, *The resonance decay function method in the determination of the pre-factor of the Néel relaxation time of single-domain nanoparticles*, 12th International Conference on Magnetic Fluids, August 1 - 5, 2010 Sendai, Japan
 56. C. Couper, **C.N. Marin**, P.C. Fannin, *Biasing field effect on the microwave dielectric properties of magnetic fluids*, 12th International Conference on Magnetic Fluids August 1 - 5, 2010 Sendai, Japan
 57. R. Totoreanu, I. Malaescu, **C. N. Marin**, *Dielectric and geotechnical properties of some characteristic soil samples from the Timis plain region*, Physics Conference Tim-10, Nov. 25th -27th, 2010, Timisoara
 58. P. C. Fannin, I. Malaescu, **C.N. Marin**, N. Stefu, D. Malaescu, *Microwave Absorbent Properties of Composite Magnetic*, Physics Conference Tim-10, Nov. 25th -27th, 2010, Timisoara
 59. P. Vlazan, S. Novaconi, A. Ercuta, **C.N. Marin**, I. Malaescu, A. Bucur, P. Sfirloaga, N. Stefu, *SYNTHESIS AND CHARACTERIZATION OF CUFe₂O₄ NANOPARTICLES PREPARED BY THE HYDROTHERMAL ULTRASONICALLY ASSISTED METHOD*, Physics Conference Tim-10, Nov. 25th -27th, 2010, Timisoara
 60. S. Novaconi, I. Malaescu, P. Vlazan, P. Sfirloaga, A. Ercuta, I. Badea, N. Stefu, **C. N. Marin**, *Synthesis of Nano-Structured Bi₂Te₃ and Zn₄Sb₃ Semiconductors for Thermal Energy Recovery*, Physics Conference Tim-10, Nov. 25th -27th, 2010, Timisoara
 61. P. C. Fannin, **C. N. Marin**, I. Mălăescu, A. Ercuța, P. Barvinschi, P. Sfirloagă, *Investigation of a Magnetic Fluid Exhibiting Double Absorption Peak in the Microwave Susceptibility Spectrum*, Physics Conference Tim-10, Nov. 25th -27th, 2010, Timisoara

62. I. Malaescu, **C. N. Marin**, S. Novaconi, P. Sfirloaga, N. Stefu, A. Ercuta, *Thermo-Electric Properties of Nanoparticulate Bi_2Te_3 and Zn_4Sb_3 Semiconductors For Application in Clean Energy*, Physics Conference Tim-10, Nov. 25th -27th, 2010, Timisoara
63. Al. Savici, I. Mălăescu, **C. N. Marin**, D. Mălăescu - *The temperature effect of the Electromagnetic properties of magnetic fluids in low-frequency field* - 12th International Balkan Workshop on Applied Physics, Constanța, July 6-8, 2011 (Book of abstracts, ISBN 978-973-614- 645-9)
64. P. C. Fannin, **C. N. Marin**, K. Raj, C. Couper and P. Barvinschi, *An experimental study of the dynamic properties of nanoparticle colloids with identical magnetization but different particle size*, Moscow International Symposium on Magnetism, Moscow, Russia, August 21-25, 2011
65. P. C. Fannin, **C. N. Marin**, *The use of magnetic spectroscopy in the investigation of the magnetic viscosity of nanoparticles at microwave frequencies*, **Progress In Electromagnetics Research Symposium**, Suzhou, China, September 12–16, 2011
66. R. Totoreanu, I. Malaescu, **C. N. Marin**, P. Sfirloaga, "The influence of the grain size and specific surface on the dielectric permittivity of sands in low frequency field", Physics Conference Tim-11, Nov. 24th -27th, 2011, Timisoara
67. I. Malaescu, S. Novaconi, C. Seitan, P. Sfirloaga, P. Vlazan, D. Malaescu, A. Ercuta, **C. N. Marin**, "Thermoelectric properties of sintered Bi_2Te_3 semiconductors", Physics Conference Tim-11, Nov. 24th -27th, 2011, Timisoara
68. **C. N. Marin**, I. Mălăescu, P. C. Fannin, A. Ercuța, N. Ștefu, P. Vlăzan, S. Novaconi, D. Mălăescu, "Electromagnetic interference shielding efficiency of some magnetic paints", Physics Conference Tim-11, Nov. 24th -27th, 2011, Timisoara
69. I. Malaescu, C. Obeada, P. C. Fannin, **C. N. Marin**, P. Barvinschi, "The temperature dependence of the magnetic susceptibility of magnetic fluids in low frequency field", Physics Conference Tim-11, Nov. 24th -27th, 2011, Timisoara
70. I. Malaescu, A. Savici, P. C. Fannin, **C. N. Marin**, "Low frequency polarizability of colloidal nanoparticles from magnetic fluids", Physics Conference Tim-11, Nov. 24th -27th, 2011, Timisoara
71. Paulina Vlăzan, Ștefan Novaconi, **C. N. Marin**, Study on microwave absorbing properties of nanopowders of $Co_xFe_{3-x}O_4$ ($x = 0.5, 0.8, 1.0$ and 1.5) obtained by hydrothermal method, Conferința Internațională "Eco-Impuls 2012" Timișoara
72. **C. N. Marin**, P. C. Fannin, I. Malaescu , Polarizing field resolved magnetic susceptibility spectra of ferrofluids, Physics Conference Tim-13, Nov. 21st -24th , 2013, Timisoara and 2013 JINR-UVT SCHOOL SMALL ANGLE NEUTRON SCATTERING 25th-26th of November 2013
73. Iosif Malaescu, Paul C. Fannin, **C. N. Marin**, Alexandru Savici, Effective heat capacity and heating rate of ferrofluids, Physics Conference Tim-13, Nov. 21st -24th , 2013, Timisoara and 2013 JINR-UVT SCHOOL SMALL ANGLE NEUTRON SCATTERING 25th-26th of November 2013
74. Alexandru Savici, Iosif Malaescu, **C. N. Marin**, Experimental study on the thermal conductivity of magnetic fluids, Physics Conference Tim-13, Nov. 21st -24th, 2013, Timisoara
75. Antoanetta Lungu, Paulina Vlăzan, I. Malaescu, **C. N. Marin**, Paula Sfirloaga, Electric properties of manganese ferrites obtained by different methods, Physics Conference Tim-13, Nov. 21st -24th, 2013, Timisoara
76. P. Sfirloaga, I. Miron, I. Malaescu, **C. N. Marin**, M. Poienar, D. Malaescu and P. Vlăzan, Physico-chemical characterization of natao₃ synthesized by ultrasonic method with immersed sonotrode, TIM 14 Physics Conference, 20 – 22 of November, 2014, Timisoara.
77. Dan Malaescu, Ioan Grozescu, Paula Sfirloaga, Paulina Vlăzan and **Catalin Nicolae Marin**, Electric properties of sodium tantalate ($NaTaO_3$) obtained by hydrothermal method, TIM 14 Physics Conference, 20 – 22 of November, 2014, Timisoara.
78. Antoanetta Lungu, Iosif Malaescu, **Catalin Nicolae Marin**, Paulina Vlăzan and Paula Sfirloaga, Complex impedance of manganese ferrite powders obtained by different methods, TIM 14 Physics Conference, 20 – 22 of November, 2014, Timisoara.
79. Gabriel Mihai Turi, **Catalin Nicolae Marin** and Marius Paulescu, A critical review of the solar energy database for the Banat plain, TIM 14 Physics Conference, 20 – 22 of November, 2014, Timisoara.
80. Laurentiu Iordăconiu, Paul C. Fannin, Iosif Malaescu and **Catalin N. Marin**, Polarizing field effect on the effective reflection coefficient of ferrofluids, TIM 14 Physics Conference, 20 – 22 of November, 2014, Timisoara.

81. Marius Spunei, Iosif Malaescu and **Catalin Marin**, *Sample thickness effect on the transmitted dose through some absorbent materials*, TIM 14 Physics Conference, 20 – 22 of November, 2014, Timisoara.
82. Aurora Gajta, Daniela Turkoanje, Iosif Dan Malaescu, **Catalin N. Marin** and Marie Jeanne Koos, *Dry eye syndrome during computer usage*, TIM 14 Physics Conference, 20 – 22 of November, 2014.
83. Iosif Malaescu, Ioan Bica, Laurentiu Iordaconiu, **Catalin N. Marin** and Paul C. Fannin, *Broadband absorbing properties of some silicone composite membranes*, TIM 15 - 16 Physics Conference, 26th – 28th of May, 2016, Timisoara.
84. Iosif Malaescu, **Catalin N. Marin** and Paul C. Fannin, *The specific absorption rate (SAR) of ferrofluids*, TIM 15 - 16 Physics Conference, 26th – 28th of May, 2016, Timisoara.
85. Dan Malaescu, Paula Sfirloaga, Paul Barvinschi, Paulina Vlazan, **Catalin N. Marin** and Iosif Malaescu, *Study of some physical properties of aluminum or copper doped NaTaO₃ powder samples*, TIM 15 - 16 Physics Conference, 26th – 28th of May, 2016, Timisoara.
86. Aurora Gajta, Daniela Turkoanje, Alecsandra Triplica, Iosif Malaescu, **Catalin Marin**, Marie Jeanne Koos and Calin Muntean, *Tear ferning test and ph of the tears at cell phone users*, TIM 15 - 16 Physics Conference, 26th – 28th of May, 2016, Timisoara.
87. **Catalin Nicolae Marin**, Paul C. Fannin, Iosif Malaescu, Kuldip Raj and Gabriel Turi, *Changes in the magnetic susceptibility spectrum of ferrofluids by magnetic shaking*, TIM 15 - 16 Physics Conference, 26th – 28th of May, 2016, Timisoara.
88. D. Lazic, P. C. Fannin, V. Socoliuc, P. Sfirloaga, P. Barvinschi, I. Malaescu, **C. N. Marin**, *The influence of the size of particles on magnetic heating of a mixed ferrite*, TIM 18 Physics Conference, 24th – 26th of May, 2018, Timisoara.
89. **C. N. Marin**, I. Malaescu, I. Bica, M. Bunoiu and G. Pascu, *Shielding effectiveness of some magnetic elastomer membranes*, TIM 18 Physics Conference, 24th – 26th of May, 2018, Timisoara.
90. M. Bunoiu, I. Bica, I. Malaescu, **C. N. Marin**, M. Lungu, G. Pascu and Larisa M. E. Chirigu, *Planar capacitors with electrically capacitance controlled by the magnetic field*, TIM 18 Physics Conference, 24th – 26th of May, 2018, Timisoara.
91. P. Sfirloaga, I. Malaescu, **C. N. Marin**, P. Vlazan and M. Poienar, *The impact of pd substitution on the physical properties of LaMnO₃*, TIM 18 Physics Conference, 24th – 26th of May, 2018, Timisoara.
92. I. Malaescu, Daniela Susan-Resiga, **C. N. Marin** and P. C. Fannin, *Thermal conductivity and rheological behaviour of ferrofluids in polarizing magnetic field*, TIM 18 Physics Conference, 24th – 26th of May, 2018, Timisoara.
93. Georgeta Matu, Antoanetta Lungu, Iosif Malaescu, Paulina Vlazan, Paula Sfirloaga, Octavian Madalin Bunoiu, **Catalin Nicolae Marin**, *Thermal analysis of the electrical properties of Zn-substituted and un-substituted manganese ferrite*, 28th Symposium on Thermal Analysis and Calorimetry – Eugen Segal – of the Commission for Thermal Analysis and Calorimetry (CATCAR28) & 2nd Symposium on Thermal Analysis and Calorimetry of Moldova (MoldTAC2), Timisoara 9-10mai, 2019.
94. I. Malaescu, P. C. Fannin, O. M. Bunoiu, **C. N. Marin**, *Magnetically tuning of microwave propagation through ferrofluids*, International Conference on Magnetic Fluids, July 8 – 12, Paris, 2019.
95. O.M. Bunoiu, G. Matu, **C. N. Marin**, I. Malaescu, *Investigation of some thermal parameters of ferrofluids in the presence of a static magnetic field*, International Conference on Magnetic Fluids, July 8 – 12, Paris, 2019.
96. D. Lazic, I. Malaescu, O. M. Bunoiu, V. Socoliuc, **C. N. Marin**, *Investigation of therapeutic-like irradiation effect on magnetic hyperthermia characteristics of water based ferrofluids*, International Conference on Magnetic Fluids, July 8 – 12, Paris, 2019.
97. E. Anitas, I. Bica, M. Bunoiu, I. Malaescu, **C. N. Marin**, A. Ercuta, M. Balasoiu, M. Lungu, G. Pascu, *Magneto-optical transmittance observed in magnetorheological suspensions films*, TIM 19 Physics Conference, 29th of May – 1st of June, 2019, Timisoara.
98. S. Brindusouiu, P. Sfirloaga, P. Vazan, P. C. Fannin, I. Malaescu, **C. N. Marin**, *The electrical conductivity of giniite Fe₅(PO₄)₄(OH)₃·2H₂O materials*, TIM 19 Physics Conference, 29th of May – 1st of June, 2019, Timisoara.

99. P. Sfirloaga, I. Malaescu, **C. N. Marin**, M. Poienar, P. Vlazan, *Effect of Fe-doping on the structural, morphological and electrical properties of LaMnO₃*, TIM 19 Physics Conference, 29th of May – 1st of June, 2019, Timisoara.
100. B. Ilie, M. Spunei, I. Malaescu, **C. N. Marin**, *The stability of silicone based bolus before and after a radiotherapy treatment*, TIM 19 Physics Conference, 29th of May – 1st of June, 2019, Timisoara.
101. **C. N. Marin**, P. C. Fannin, *Microwave magneto-permittivity of ferrofluids*, 4th International Summer School and Workshop “Complex and Magnetic Soft Matter Systems: Physico-Mechanical Properties and Structure” 19-23 April 2021, Timisoara, Romania (**invited lecture**)
102. Vlad Socoliu and **Catalin Nicolae Marin** *Spontaneous and magnetically induced nanoparticle clustering in moderately concentrated transformer oil based magnetic fluids* TIM 20-21 Physics Conference, 11th of November – 13th of November, 2021, Timisoara.
103. Alexandrina Teusdea, P. C. Fannin, O. M. Bunoiu, I. Malaescu, **C. N. Marin**, *Magnetic field effect on some electrical properties of ferrofluid in low frequency field* TIM 20-21 Physics Conference, 11th of November – 13th of November, 2021, Timisoara.
104. A. Teusdea, P. C. Fannin, I. Malaescu, **C. N. Marin**, *The effect of a polarizing magnetic field on the dynamic properties and of the specific absorption rate of ferrofluids in the microwave range*, 4th International Summer School and Workshop “Complex and Magnetic Soft Matter Systems: Physico-Mechanical Properties and Structure”, 19-23 April 2021, Timisoara, Romania
105. **C. N. Marin**, *Design of the Microwave Propagation Parameters in Magnetic Fluids*, FUTURE MATERIALS 2022: 3rd International Conference on Materials Science & Nanotechnology, October 03-05, 2022 | Rome, Italy, <https://materialsconference.yuktan.com/featured-speakers> (**invited lecture**)
106. **Catalin N. Marin**, P. C. Fannin, I. Malaescu, O. M. Bunoiu, *On the modeling of microwave ferrofluidic absorbers*, Physics Conference TIM-22, Timișoara, November 23rd – 25th, 2022, https://timconference.uvt.ro/upload/CMP_Program_TIM22.pdf
107. Iosif Malaescu, Paul C. Fannin, **Catalin N. Marin** and Madalin O. Bunoiu, POLARIZING MAGNETIC FIELD EFFECT ON SOME ELECTRICAL PROPERTIES OF A FERROFLUID IN MICROWAVE FIELD, TIM-24, Physics Conference, Timisoara, May 30th -June 1st, 2024 https://timconference.uvt.ro/upload/Conference_Program_TIM24.pdf
108. **Cătălin Nicolae Marin**, Daniel Ursu, Marinela Miclău, Iosif Mălăescu and Cristian Casut, ENHANCING DIELECTRIC PROPERTIES OF FLEXIBLE PEROVSKITE-SILICONE RUBBER COMPOSITES, TIM-24, Physics Conference, Timisoara, May 30th -June 1st, 2024 https://timconference.uvt.ro/upload/Conference_Program_TIM24.pdf
109. C. N. Marin, P. C. Fannin, O. M. Bunoiu, I. Malaescu, Broadband dielectric spectroscopy of ferrofluids, 22nd INTERNATIONAL BALKAN WORKSHOP on APPLIED PHYSICS (IBWAP), 2024, Constanta, July 9th – July 12th, https://ibwap.ro/wp-content/uploads/2024/06/v1_IBWAP2024_program.pdf

C) Books and monographs (as autor or editor)

1. **C. N. Marin**, I. Nagy, R. Georgescu “Bazele metodei de tratare a cancerului prin hipertermia magnetică a țesuturilor”, Editura Eurobit, Timișoara, 2005, ISBN 973-620-188-0.
2. **C. N. Marin**, I. Malaescu, „Fizica și tehnologia materialelor dielectrice”, Editura Universitatii de Vest din Timisoara, 2008, ISBN 978-973-125-166-0.
3. Nicoleta Ștefu, **C. N. Marin**, “Fizica pământului și a atmosferei”, Editura Eurobit, Timișoara, 2008, ISBN 978-973-620-415-9.
4. **C. N. Marin**, “Comportarea sistemelor disperse de nanoparticule magnetice în câmpuri magnetice statice și dinamice”, Editura Eurobit, Timișoara, 2014, ISBN 978-973-132-127-1.
5. **C. N. Marin**, “Fizică experimentală”- Curs, Editura Eurobit, Timișoara, 2014, ISBN 978-973-132-168-4.
6. **C. N. Marin**, “Măsurarea parametrilor electrici și magnetici ai materialelor cu linii de transmisie – Notite pentru laborator”, Editura Eurobit, Timișoara, 2014, ISBN 978-973-132-183-7.
7. M. Spunei, I. Mălăescu, Maria Mihai, **C. N. Marin**, “Elemente de fizica radiațiilor și dozimetrie cu aplicații în radioterapie”, Editura Eurobit, Timișoara, 2014, ISBN 978-973-132-193-6.

8. **C. N. Marin**, I. Mălăescu, “*Electronică – Culegere de probleme*”, Editura Eurobit, Timișoara, 2015, ISBN 978-973-132-245-2.
9. **C. N. Marin**, “*Proprietăți magnetice ale materialelor - notițe pentru laborator*”, Editura Eurobit, Timișoara, 2016, ISBN 978-973-132-326-8.
10. TIM 18 PHYSICS CONFERENCE, **Editor C. N. Marin**, AIP Conference Proceedings, vol. 2071, 2019, ISBN: 978-0-7354-1799-1, link: <https://aip.scitation.org/toc/apc/2071/1?size=all>
11. Doru Marcel Băltăteanu, **C. N. Marin**, “*Caiet de Seminar. Electricitate și Magnetism*”, Editura Eurobit, Timișoara, 2021, ISBN 978-973-132-796-9.
12. Mihail Lungu, **C. N. Marin** (Editors) *The Fundamentals and Challenges of Oxide Materials* Cambridge Scholars Publishing, 2023, ISBN: 1-5275-9166-2, <https://www.cambridgescholars.com/product/978-1-5275-9166-0>
13. Mădălin Bunoiu, Aurel Ercuta, Mihail Lungu, Antoanetta Lungu, Iosif Malaescu, **Catalin Nicolae Marin**, Maria Poenar, Paula Sfirloaga, Paulina Vlazan, *The Fundamentals and Challenges of Oxide Materials* Cambridge Scholars Publishing, 2023, ISBN: 1-5275-9166-2, <https://www.cambridgescholars.com/product/978-1-5275-9166-0>
14. **C. N. Marin** (Guest Editor) Advances in Electromagnetic Properties of Magnetic Materials, A special issue of Materials, 2023, ISSN 1996-1944. https://www.mdpi.com/journal/materials/special_issues/Adv_Electromagn_Prop_Magn_Mater