PERSONAL INFORMATION IFTIMIE SORINA

BIRTH DAY 04.05.1982

FULL ADDRESS OF PERMANENT INSTITUTION Faculty of Physics, University of Bucharest
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EXPERIENCE

November, 2021 – November, 2022: Guest Editor of the Special Issue "Multilayer Coatings from Nanomaterials: From Synthesis to Applications" of Coatings Journal, ISSN 2079-6412, https://www.mdpi.com/journal/coatings/special_issues/Multilayer_coatings

- responsible for the intellectual content of the Special Issue and the manuscripts that comprises it
- reviews and arranges for review articles that are submitted to be published in the Special Issue
- invites papers and authors for possible inclusion in the Special Issue

September, 2021 – July, 2022: Guest Editor of the Special Issue "One- and Two-Dimensional Architectures for Electronic and Optoelectronic Devices" of Materials Journal, ISSN 1996-1944, https://www.mdpi.com/journal/materials/special_issues/Electronic_Optoelectronic_Devices

- responsible for the intellectual content of the Special Issue and the manuscripts that comprises it
- reviews and arranges for review articles that are submitted to be published in the Special Issue
- invites papers and authors for possible inclusion in the Special Issue

April, 2021 – present: member of the Editorial Board as Topic Editor of Materials Journal, https://www.mdpi.com/journal/materials

- setting up a Special Issue over two years in the journal
- promoting the journal during conferences
- providing support for various Special Issues on topics related to my expertise

February, 2020 – present: Associate Professor, Electricity, Solid State Physics and Biophysics Department, Faculty of Physics, University of Bucharest

- classes (Electricity and Magnetism, Technologies for photovoltaic cells based on organic and inorganic materials, Optoelectronics, Solid State Physics, Technologies for nanomaterials and nanostructures, Renewable energy sources)

October, 2019 – present: member of the Council of the Electricity, Solid State Physics and Biophysics Department of the Faculty of Physics of the University of Bucharest

- manage the schedule of rooms for classes
- draws up the statements of classes
- draws up the statements for supplementary work hours
- manage the relation between the members of the Faculty of Physics Council and

the members of Electricity, Solid State Physics and Biophysics Department

October, 2019 – present: Erasmus Office Coordinator for the Faculty of Physics of the University of Bucharest

- manage the selection of Romanian students for Erasmus fellowship
- manage the transcript of records for Erasmus foreign students
- manage the statements for Erasmus+ visiting professors
- manage the relationship between Erasmus Office of University of Bucharest and the foreign students

October, 2014 – February, 2020: Lecturer, Electricity, Solid State Physics and Biophysics Department, Faculty of Physics, University of Bucharest

- classes (Electricity and Magnetism, Technologies for photovoltaic cells based on organic and inorganic materials, Solid State Physics, Technologies for nanomaterials and nanostructures, Renewable energy sources)

October, 2014 – present: Senior Researcher, Research & Development Center for Electronic and Optoelectronic Materials and Devices (MDEO), Faculty of Physics, University of Bucharest

January, 2009 – October, 2014: Research Assistant, Research & Development Center for Electronic and Optoelectronic Materials and Devices (MDEO), Faculty of Physics, University of Bucharest

- basic research in the field of organic and inorganic photovoltaic cells
- transport properties of nanoscale devices
- nanostructures
- classes (thin films deposition methods, optical characterization methods, morphological characterization methods)

EDUCATION

January, 2013 – December, 2013: Postdoctoral stage, ”Study of physical properties of photovoltaic cells based on thin films”, LPHIA Laboratory, LUNAM - Angers University, France

October, 2008 – September, 2011: Ph.D, Condensed State Physics, Faculty of Physics, University of Bucharest, Bucharest, Romania. Thesis’s name: Contribution to the study of photovoltaic cells based on thin films of organic and inorganic semiconductors

October, 2005 – February, 2007: Master Degree in Biophysics and Medical Physics, Faculty of Physics, University of Bucharest, Bucharest, Romania. Name of dissertation work: Minimize unwanted damage in laser ablation process

October, 2001 – July, 2005: Faculty of Physics, University of Bucharest, Bucharest, Romania, Specialization in Medical Physics. Name of diploma work: Applications of laser ablation in cardiology

Foreign Languages	➢ English (C1) ➢ French (B2)
Technica skills and competences	➢ Oprical and electrical characterization (spectrometer and elipsometry) ➢ Thin films deposition methods (spin-coating, thermal vacuum evaporation, magnetron sputtering) ➢ Nanomaterials and nanostructures ➢ Transport properties of nanoscale devices ➢ Surface morphology characterization, atomic force microscopy (AFM) and scanning electron microscopy (SEM) ➢ Electrical and photo-electrical measurements for thin films and optoelectronic devices ➢ DFT calculations, R-matrix method

ISI PUBLICATIONS

1. Relationship between the formation of magnetic clusters and hexagonal phase of gold matrix in AuxFe1-x nanophase thin films, C. Locovei, C. Radu, A. Kuncser, N. Iacob, G. Schinteie, A. Stanciu, **S. Iftimie**, V. Kuncser, Nanomaterials **12**, 1176 (2022).

2. Bio-nanoplatinum phyto-developed from grape berries and nettle leaves: potential adjuvants in osteosarcoma treatment, M.E. Barbinta-Patrascu, M. Bacalum, V.A. Antohe, **S. Iftimie**, S. Antohe, Romanina Reports in Physics **74**, 601 (2022).

3. Biogenic ferrihydrite nanoparticles produced by Klebsiella oxytoca: characterization, physicochemical properties and bovine serum albumin interactions, N. Cazacu, C.G. Chilom, **S. Iftimie**, M. Balasoiu, V.P. Ladygina, S.V. Stolyar, O.L. Orelovich, Y.S. Kovalev, A.V. Rogachev, Nanomaterials **12**, 249 (2022).

4. Effect of RF power on the physical properties of sputtered ZnSe nanostructured thin films for photovoltaic applications, O. Toma, V.A. Antohe, A.M. Panaitescu, **S. Iftimie**, A.M. Raduta, A. Radu, L. Ion, S. Antohe, Nanomaterials **11**, 2841 (2021).

5. An investigation of annealing and (Zn plus Co) co-loading impact on certain physical features and nano-structured (CdO) thin films coated by a sol-gel spin coating process, K.S. Mohammed, J.M. Mansoor, J. Alzanganawee, **S. Iftimie**, Journal of Ovonic Research **17**, 447-460 (2021).

6. Thickness effect on some physical properties of RF sputtered ZnTe thin films for potential photovoltaic applications, D. Manica, V.A. Antohe, A. Moldovan, R. Pascu, **S. Iftimie**, L. Ion, M.P. Suchea, S. Antohe, Nanomaterials **11**, 2286 (2021).

7. Characterization of monochromatic aberrated metalenses in terms of intensity-based moments, **S. Iftimie**, A.M. Raduta, D. Dragoman, Nanomaterials **11**, 1805 (2021).

8. Interactions of chemically synthesized ferrihydrite nanoparticles with human serum transferrin: insights from fluorescence spectroscopic studies, C.G. Chilom, N. Sandu, **S. Iftimie**, M. Balasoiu, A. Rogachev, O. Orelovich, S. Stolyar, International Journal of Molecular Sciences **22**, 7034 (2021).

9. Synthesis of titanium nitride via hybrid nanocomposites based on mesoporous TiO2/acrylonitrile, C. Locovei, A.L. Chiriac, A. Miron, **S. Iftimie**, V.A. Antohe, A. Sarbu, A. Dumitru, Scientific Reports **11**, 5055 (2021).

10. Phase-controlling infrared thermal emitting metasurfaces, D. Dragoman, **S. Iftimie**, A. Radu, Journal of Optics **23**, 035103 (2021).

11. Physical properties of RF-sputtered ZnSe thin films for photovoltaic applications: influence of film thickness, L. Ion, **S. Iftimie**, A. Radu, V.A. Antohe, O. Toma, S. Antohe, Proceedings of the Romanian Academy Series A – Mathematics, Physics, Technical Sciences, Information Science **22**, 25 (2021).

12. GeSn/SiO2 multilayers by magnetron sputtering deposition for short-wave infrared photonics, A. Slav, I. Dascalescu, A.M. Lepadatu, C. Palade, N.C. Zoita, H. Stroescu, **S. Iftimie**, S. Lazanu, M. Gartner, D. Buca, V.S. Teodorescu, M.L. Ciurea, M. Braic, T. Stoica, ACS Applied Materials & Interfaces **12**, 56161 (2020).

13. Influence of SiGe nanocrystallization on short-wave infrared sensitivity of SiGe-TiO2 films and multilayers, A.M. Lepadatu, C. Palade, A. Slav, O. Cojocaru, V.A. Maraloiu, **S. Iftimie**, F. Comanescu, A. Dinescu, V.S. Teodorescu, T. Stoica, M.L. Ciurea, Journal of Physical Chemistry C **124**, 25043 (2020).

14. On the physical and photo-electrical properties of organic photovoltaic cells based on 1,10-Phenanthroline and 5,10,15,20-Tetra(4-pyridyl)-21H,23H-porphine non-fullerene thin films, A.I. Calugar, V.A. Antohe, **S. Iftimie**, A. Radu, M. Filipescu, L. Ion, M. Dinescu, S. Antohe, Applied Surface Science **531**, 147332 (2020).

15. Effects of annealing on the physical properties of ITO thin films grown by radio frequency magnetron sputtering, A. Radu, C. Locovei, V.A. Antohe, M. Socol, D. Coman, M. Manica, A. Dumitru, L. Dan, C. Radu, A.M. Raduta, L. Ion, **S. Iftimie**, S. Antohe, Digest Journal of Nanomaterials and Biostructures **15**, 679 (2020).

16. Epitaxial GeSn obtained by high power impulse magnetron sputtering and the heterojunction with embedded GeSn nanocrystals for shortwave infrared detection, I. Dascalescu, N.C. Zoita, A. Slav, E. Matei, **S. Iftimie**, F. Comanescu, A.M. Lepadatu, C. Palade, S. Lazanu, D. Buca, V.S. Teodorescu, M.L. Ciurea, M. Braic, T. Stoica, ACS Applied Materials & Interfaces **12**, 33879 (2020).

17. On the structural, morphological, and electrical properties of carbon nanowalls obtained by plasma-enhanced chemical vapour deposition, B. Bita, S. Vizireanu, D. Stoica, V. Ion, S. Yehia, A. Radu, **S. Iftimie**, G. Dinescu, Journal of Nanomaterials **2020**, 8814459 (2020).

18. Reconfigurable logic gates in nanowires with Rashba spin-orbit interaction, **S. Iftimie**, A. Radu, D. Dragoman, Physica E: Low-Dimensional Systems and Nanostructures **120**, 114064 (2020).

19. SWIR photoresponse of SiGe/TiO2 multilayers with Ge-rich SiGe nanocrystals, A.M. Lepadatu, C. Palade, A. Slav, I. Dascalescu, O. Cojocaru, S. Iftimie, V.S. Teodorescu, T. Stoica, M.L. Ciurea, CAS 2020 Proceedings: 2020 International Semiconductor Conference, 43rd International Semiconductor Conference, 235 (2020).

20. Physical properties of indium zinc oxide and aluminium zinc oxide thin films deposited by radio-frequency magnetron sputtering, N. Vasile, **S. Iftimie**, T. Acsente, C. Locovei, A.I. Calugar, A. Radu, L. Ion, V.A. Antohe, D. Manica, O. Toma, G. Dinescu, S. Antohe, Materials Research Express **6**, 126447 (2019).

21. Enhancing the performance of microbial fuel cells (MFCs) with nitrophenyl modified carbon nanotubes-based anodes, **S. Iftimie**, A. Dumitru, Applied Surface Science **492**, 661 (2019).

22. Physical properties of Cu and Dy co-doped ZnO thin films prepared by radio frequency magnetron sputtering for hybrid organic/inorganic electronic devices, C. Locovei, D. Coman, A. Radu, L. Ion, V.A. Antohe, N. Vasile, A. Dumitru, **S. Iftimie**, S. Antohe, Thin Solid Films **685**, 379 (2019).

23. Glucose detection using BSA:PEDOT-PSS as bioactive solute and solid bioactive layer deposited by spin coating, O. Brincoveanu, A. Ioanid, R. Mesterca, A. Pantazi, C. Moise, M. Enachescu, **S. Iftimie**, S. Antohe, Romanian Reports in Physics **71**, 603 (2019).

24. Physical properties of the ferroelectric capacitors based on Al-doped HfO2 grown via atomic layer deposition on Si, S. Vulpe, F. Nastase, M. Dragoman, A. Dinescu, C. Romanitan, **S. Iftimie**, A. Moldovan, N. Apostol, Applied Surface Science **483**, 324 (2019).

25. Physical properties of rf-sputtered ZnS and ZnSe thin films used for double-heterojunction ZnS/ZnSe/ZnTe photovoltaic structures, O. Toma, L. Ion, **S. Iftimie**, V.A. Antohe, A. Radu, A.M. Raduta, D. Manica, S. Antohe, Applied Surface Science **478**, 831 (2019).

26. Ballistic 3-port interferometric logic gates in the quantum Hall regime, A. Radu, **S. Iftimie**, D. Dragoman, Physica E – Low-Dimensional Systems and Nanostructures **109**, 144 (2019).

27. Carbon nanotubes and carbonized polyaniline nanostructures as 3D modified anode for microbial fuel cells, **S. Iftimie**, C. Bradu, A. Dumitru, Proceedings of the Romanian Academy Series A – Mathematics Physics Technical Sciences Information Science **20**, 45 (2019).

28. On the electrical and photo-electrical behaviour of the photovoltaic cells based on polymeric and chlorophyll-a thin films, B. Bita, **S. Iftimie**, A. Radu, V.A. Antohe, D. Coman, C. Miron, D. Staicu, L. Dan, L. Ion, S. Antohe, Proceedings of the Romanian Academy Series A – Mathematics Physics Technical Sciences Information Science **20**, 51 (2019).

29. Optoelectric charging-discharging of Ge nanocrystals in floating gate memory, C. Palade, A. Slav, A.M. Lepadatu, A.V. Maraloiu, I. Dascalescu, **S. Iftimie**, S. Lazanu, M.L. Ciurea, T. Stoica, Applied Physics Letters **113**, 213106 (2018).

30. On the physical properties of inverted photovoltaic structures based on P3OT:F-SWCNTs active layer, J. Al-Zanganawee, **S. Iftimie**, A. Pantazi, R. Mesterca, A. Jderu, S. Antohe, M. Enachescu, Journal of Ovonic Research **14**, 287 (2018).

31. On the structural, optical and morphological properties of $ZnSe_{1-x}O_x$ thin films grown by rf-magnetron sputtering, **S. Iftimie**, F.F. Baiasu, A. Radu, V.A. Antohe, S. Antohe, L. Ion, Chalcogenide Letters **15**, 389 (2018).

32. Dense Ge nanocrystals embedded in TiO2 with exponentially increased photoconduction by field effect, A.M. Lepadatu, A. Slav, C. Palade, I. Dascalescu, M. Enculescu, **S. Iftimie**, S. Lazanu, V.S. Teodorescu, M.L. Ciurea, T. Stoica, Scientific Reports **8**, 4898 (2018).

33. Optimization of the structural configuration of ICBA/P3HT photovoltaic cells, G.A. Nemnes, **S. Iftimie**, A. Palici, A. Nicolaev, T.L. Mitran, A. Radu, S. Antohe, Applied Surface Science **424**, 264 (2017), 11th International Conference on Physics of Advanced Materials (ICPAM), September 8 – 14, 2016, Cluj-Napoca, Romania.

34. A critical review of photovoltaic cells based on organic monomeric and polymeric thin films heterojunctions, S. Antohe, **S. Iftimie**, L. Hrostea, V.A. Antohe, M. Girtan, Thin Solid Films **642**, 219 (2017).

35. Morphological and structural properties of ZnO nanorods fabricated by microwave assisted hydrothermal method, V.A. Surdu, J. Al-Zanganawee, **S. Iftimie**, University Politetehnica of Bucharest Scientific Bulletin-Series A-Applied Mathematics and Physics **79**, 255 (2017).

36. Ni-based nanowire arrays as chemical and magnetic field sensors, A. Radu, **S. Iftimie**, L. Ion, S. Antohe, D. Dragoman, Proceedings of the Romanian Academy Series A – Mathematics, Physics, Technical Sciences, Information, Science **18**, 207 (2017).

37. Organic heterostructures deposited by MAPLE on AZO substrate, M. Socol, N. Preda, A. Stanculescu, C. Breazu, C. Florica, F. Stanculescu, **S. Iftimie**, M. Girtan, G. Popescu-Pelin, G. Socol, Applied Surface Science **417**, 196 (2017), 10th International Conference on Photo-Excited Processes and Applications (ICPEPA), 29.08 – 02.09.2016, Brasov, Romania.

38. On the morphological, electrical and photoelectrical properties of P3HT:F-SWCNTs based photovoltaic cells, J. Al-Zanganawee, **S. Iftimie**, A. Pantazi, O. Brincoveanu, R. Mesterca, A. Radu, S. Antohe, M. Enachescu, Journal of Ovonic Research **13**, 63 (2017)

39. Optimization of halide perovskite solar cells based nanocolumnar ZnO, A. Nicolaev, T.L. Mitran, **S. Iftimie**, G.A. Nemnes, Solar Energy Materials and Solar Cells **158**, 202 (2016), Nanotechnology for Next Generation High Efficiency Photovoltaics Spring International School and Workshop (NEXTGEN NANOPV), April 20 – 24, 2016, Menorca, Spania.

40. Morphological and optical properties of functionalized SWCNTs:P3OT nanocomposite thin films, prepared by spin-coating, J. Al-Zanganawee, M. Al-Timimi, A. Pantazi, O. Brincoveanu, C. Moise, R. Mesterca, D. Balan, **S. Iftimie**, M. Enachescu, Journal of Ovonic Research **12**, 201 (2016).

41. Study of physical properties of BSA:PEDOT-PSS thin films obtained by spin-coating, O. Brincoveanu, A. Ioanid, **S. Iftimie**, J. Al-Zanganawee, M. Enachescu, S. Antohe, Digest Journal of Nanomaterials and Biostructures **11**, 833 (2016).

42. Structural, morphological and optical properties of rf-sputtered CdS thin films, O. Toma, L. Ion, **S. Iftimie**, A. Radu, S. Antohe, Materials & Design **100**, 198 (2016).

43. New studies of physical properties of functionalized single wall carbon nanotubes based hybrid photovoltaic cells, J. Al-Zanganawee, **S. Iftimie**, T. Mubarak, A. Radu, O. Brincoveanu, S. Antohe, M. Enachescu, Journal of Ovonic Research **12**, 95 (2016).

44. Influence of the PEDOT:PSS layer on the performance of the photovoltaic devices, O. Brincoveanu, A. Ioanid, **S. Iftimie**, S. Antohe, Romanian Reports in Physics **68**, 1097 (2016).

45. Charge localization effects and transport in dendritic nanostructures for photovoltaic applications, G.A. Nemnes, **Sorina Iftimie**, Applied Surface Science **352**, 158-162 (2015), 10th International Conference on Physics of Advanced Materials (ICPAM), September 22 – 28, 2014, Iasi, Romania.

46. Photovoltaic structures based on biologic/polymeric semiconducting thin films, **S. Iftimie**, M.E. Barbinta-Patrascu, D. Gazdaru, A. Radu, B. Bita, D. Staicu, N. Korganci, L. Ion, S. Antohe, Digest Journal of Nanomaterials and Biostructures **4**, 1249 (2015).

47. New studies of the ionizing irradiation effects on CdS/CdTe heterojunction, L. Ion, V. Ghenescu, M. Ghenescu, M.M. Gugiu, **S. Iftimie**, A. Radu, N. Vasile, O. Toma, S. Antohe, Romanian Reports in Physics **4**, 1570 (2015).

48. Structural and electrical properties of N doped SiC nanostructures obtained by TVA method, V. Ciupina, C.P. Lungu, R. Vladoiu, G.C. Prodan, S. Antohe, C. Porosnicu, I. Stanescu, I. Jepu, **S. Iftimie**, M. Belc, A. Mandes, V. Dinca, E. Vasile, V. Zarovski, V. Nicolescu, A. Caraiane, Nanostructured Thin Films VIII **9558**, 955808, Conference on Nanostructured Thin Films VIII, August 12 – 13, 2015, San Diego, United States of America.

49. On the structural, morphological and optical properties of ITO, ZnO, ZnO:Al and NiO thin films obtained by thermal oxidation, **Sorina Iftimie**, R. Mallet, J. Merigeon, L. Ion, Mihaela Girtan, S. Antohe, Digest Journal of Nanomaterials and Biostructures **10**, 221-229 (2015).

50. The effect of the substrate temperature and the acceleration potential drop on the structural and physical properties of SiC thin films deposited by TVA method, V. Ciupina, C.P. Lungu, R. Vladoiu, G.C. Prodan, S. Antohe, C. Porosnicu, I. Stanescu, I. Jepu, **Sorina Iftimie**, M. Prodan, A. Mandes, V. Dinca, E. Vasile, V. Zarovski, V. Nicolescu, Nanostructured Thin Films VII **9172**, 91720Y (2014), Conference on Nanostructured Thin Films VII, August 20 – 21, 2014, San Diego, United States of America.

51. The spectral response of the photovoltaic cells based on CdS/CdTe heterojunction with different TCO's, **Sorina Iftimie**, C. Tazlaoanu, A. Radu, Raluca Constantineanu, C. Vancea, N. Korganci, L. Ion, S. Antohe, Digest Journal of Nanomaterials and Biostructures **9**, 213-221 (2014).

52. Effect of CNTs and metal-phthalocyanines adding on the photo-electrical behavior of the photovoltaic structures based on polymeric blends, L. Baschir, S. Antohe, A. Radu, Raluca Constantineanu, **Sorina Iftimie**, I.D. Simandan, M. Popescu, Digest Journal of Nanomaterials and Biostructures **8**, 1645-1651 (2013).

53. Study of the optical and electrical properties of colloidal silver solutions, Eleonora Burnete, **Sorina Iftimie**, S. Antohe, V. Ciupina, Optoelectronics and Advanced Materials – Rapid Communications **7**, 411-413 (2013).

54. Optical analogues of chiral fermions in graphene, Daniela Dragoman, A. Radu, **Sorina Iftimie**, Journal of Optics **15**, 035710 (2013).

55. Silver nanoparticles for different applications, Eleonora Burnete, **Sorina Iftimie**, S. Antohe, V. Ciupina, Optoelectronics and Advanced Materials – Rapid Communications **6**, 11-12 (2012).

56. PLD deposited Al2O3 thin films for transparent electronics, M. Ion, C. Berbecaru, **Sorina Iftimie**, M. Filipescu, M. Dinescu, S. Antohe, Digest Journal of Nanomaterials and Biostructures **7**, 1609-1614 (2012).

57. Steering and collimating ballistic electrons with amphoteric refraction, A. Radu, Daniela Dragoman, **Sorina Iftimie**, Journal of Applied Physics **112**, 024318 (2012).

58. Effects of alpha particles irradiation on the photo-electrical properties of CdS/CdTe heterojunctions, S. Antohe, Veta Ghenescu, **Sorina Iftimie**, A. Radu, O. Toma, L. Ion, Digest Journal of Nanomaterials and Biostructures **7**, 941-946 (2012).

59. UV-absorption mechanisms of Ni2+ binding bovine serum albumin, Marinela Dieaconu, Ana Ioanid, **Sorina Iftimie**, S. Antohe, Digest Journal of Nanomaterials and Biostructures **7**, 1125-1137 (2012).

60. Manipulating ballistic electrons by refraction at an interface between isotropic and anisotropic media, A. Radu, **Sorina Iftimie**, Daniela Dragoman, 2012 International Semiconductor Conference (CAS) **2**, 113-116 (2012), 35th International Semiconductor Conference (CAS), October 15 – 17, 2012, Sinaia, Romania.

61. Effect of protons irradiation on the performances of CdS/CdTe photovoltaic cells for space applications, S. Antohe, **Sorina Iftimie**, Veta Ghenescu, Raluca Constantineanu, M.M. Gugiu, M. Ion, I. Stan, A. Radu, L. Ion, Romanian Reports in Physics **64**, 1153-1162 (2012).

62. New investigations applied on cadmium sulfide thin films for photovoltaic applications, O. Toma, **Sorina Iftimie**, Cristina Besleaga, T.L. Mitran, Veta Ghenescu, Oana Porumb, A. Toderas, M. Radu, L. Ion, S. Antohe, Chalcogenide Letters **8**, 747-756 (2011).

63. Influence of PEDOT:PSS layer on the performances of bulk-heterojunction photovoltaic cells based on MEH-PPV:PCBM(1:4) polymeric blends, **Sorina Iftimie**, A. Radu, M. Radu, Cristina Besleaga, I. Pana, Simona Craciun, Mihaela Girtan, L. Ion, S. Antohe, Digest Journal of Nanomaterials and Biostructures **6**, 1631-1638 (2011).

64. The influence of LiF layer and ZnO nanoparticles addings on the performances of flexible photovoltaic cells based on polymer blends, A. Radu, **Sorina Iftimie**, Veta Ghenescu, Cristina Besleaga, V.A. Antohe, G. Bratina, L. Ion, Simona Craciun, Mihaela Girtan, S. Antohe, Digest Journal of Nanomaterials and Biostructures **6**, 1141-1148 (2011).

65. Influence of Al doping agents nature on the physical properties of Al:ZnO films deposited by spin-coating technique, F.Z. Ghomrani, **Sorina Iftimie**, N. Gabouze, A. Serier, Marcela Socol, Anca Stanculescu, F. Sanchez, S. Antohe, Mihaela Girtan, Optoelectronics and Advanced Materials – Rapid Communications **5**, 247-251 (2011).

66. Study of electrical and optical properties of ITO/PEDOT/P3HT:PCBM(1:1)/LiF/Al photovoltaic structures, **Sorina Iftimie**, A. Majkic, Cristina Besleaga, V.A. Antohe, A. Radu, M. Radu, Iulia Arghir, Camelia Florica, L. Ion, G. Bratina, S. Antohe, Journal of Optoelectronics and Advanced Materials **12**, 2171-2175 (2010).

67. Effects of proton irradiation on the spectral performances of photovoltaic cells based on CdS/CdTe thin films, L. Ion, I. Enculescu, **Sorina Iftimie**, Veta Ghenescu, C. Tazlaoanu, Cristina Besleaga, T.L. Mitran, V.A. Antohe, M.M. Gugiu, S. Antohe, Chalcogenide Letters **7**, 521-530 (2010).

68. Temperature dependent resistivity and Hall effect in proton irradiated CdS thin films, L. Ion, Veta Ghenescu, **Sorina Iftimie**, V.A. Antohe, A. Radu, M. Gugiu, G. Velisa, Oana Porumb, S. Antohe, Optoelectronic and Advanced Materials – Rapid Communications **4**, 1114-1117 (2010).

69. Electrical and photoelectrical properties of organic photovoltaic cells based on polymer blends ITO/PEDOT/P3HT:PCBM(1:1), Larisa Magherusan, Polona Skraba, Cristina Besleaga, **Sorina Iftimie**, Nicoleta Dina, Mirela Bulgariu, C.G. Bostan, C. Tazlaoanu, A. Radu, L. Ion, M. Radu, A. Tanase, G. Bratina, S. Antohe, Journal of Optoelectronics and Advanced Materials **12**, 212-218 (2010).

Non-ISI PUBLICATIONS

1. GeSn nanocrystals in GeSnSiO2 by magnetron sputtering for short-wave infrared detection, Adrian Slav, Catalin Palade, Constantin Logofatu, Ioana Dascalescu, Ana M. Lepadatu, Ionel Stavarache, Florin Comanescu, **Sorina Iftimie**, Stefan Antohe, Sorina Lazanu, Valentin S. Teodorescu, Dan Buca, Magdalena L. Ciurea, Mariana Braic, Toma Stoica, ACS Applied NanoMaterials **2**, 3626 (2019).

Scientomteric indicators

- 70 papers published in peer-review journal
- 447 citations
- H-index = 12, by Web of Science Core Collection

BOOKS & Chapter of books

1. Thickness effect on some physical properties of RF sputtered ZnTe thin films for potential photovoltaic applications, D. Manica, V.A. Antohe, A. Moldovan, R. Pascu, **S. Iftimie**, L. Ion, M.P. Suchea, S. Antohe in Novel Nanocomposites – Optical, Electrical, Mechanical, and Surface Related Properties, eds. M.P. Suchea, E. Koudoumas, P. Pascariu, MDPI, Basel, 2021.

2. Electrical and morphological characterization of carbon nanowall layers obtained by a low-pressure plasma jet, Bogdan Bita, Alexandra M.I. Trefilov, Stefan-Marian Iordache, **Sorina Iftimie**, Sasa Yehia, Sorin Vizireanu, Gheorghe Dinescu in Optoelectronics into a powerful economy, pp. 185 – 190, Ed. Roxana Radvan, AGIR Publishing House, 2020, ISBN 978-973-720-822-4

3. Study of the physical properties of chlorophyll-a and polymers thin films for photovoltaic applications – a brief review, **S. Iftimie**, V.A. Antohe, A. Radu, S. Antohe, Proceedings of the International Workshop on Advances in Nanomaterials, Horia Hulubei Publishing House – pp. 27-39, ISBN 978-606-94603-6-8, Bucharest, 2018

4. Technologies for Semiconducting Materials. Physical processes – Laboratory guide; by Stefan Antohe, Lucian Ion, Florin Stanculescu, **Sorina Iftimie**, Adrian Radu, Vlad-Andrei Antohe, Ed. ARS DOCENDI – University of Bucharest, ISBN 978-973-558-940-0, Bucharest, 2016 – Romanian only

AWARDS

1. Study of the physical properties of P3HT, PCBM and Si:PCPDTBT thin films based photovoltaic cells, Alina Irina Calugar, **Sorina Iftimie**, Adrian Radu, Maria Dinescu, Vlad-Andrei Antohe, Lucian Ion, and S. Antohe – Best Poster Presentation at EMRS Spring 2019, Symposium V.

RESEARCH STAGES

1. A.P.E. Research Company, Trieste, Italy, February 12 – 18, 2018 – atomic force microscopy training
2. University of Nova Gorica, Slovenia, October 17 – 23, 2011 – organic photovoltaic devices
3. University of Nova Gorica, Slovenia, October 11 – 23, 2010 – organic photovoltaic devices

EDICATIONAL STAGES

1. Erasmus Stage, University of Angers, France, 2014, 30.06 – 04.07

OTHER SKILLS

1. Member of the evaluation commission of the contest for Scientific Researcher degree and Scientific Researcher degree III at the National Institute of Materials Physics – NIMP Bucharest,
2. Chair of the Nanoscience and Nanoengineering Section of the International Semiconductor Conference – CAS 2021, virtual event organized by the National Institute for Research and Development in Microtechnologies – IMT Bucharest, 06.10 – 08.10.2021.
3. Member of the Crystal Growth Romanian Society, since 2016, May until present.
4. Member of the Organizing Committee of The 9th International Conference on Advanced Materials – ROCAM 2017, July 11 – 14, Bucharest, Romania.
5. 2. Section Organizer of The 8th International Conference on Advanced Materials – ROCAM 2015, July 7 – 10, Bucharest, Romania.
6. Member of the Technical Committee of The 7th International Conference on Advanced Materials – ROCAM 2012, August 28 – 31, Brasov, Romania.
7. Member of the Materials Research Society, since 2010, May until present.
8. Reviewer – Physica Status Solidi A: Applications and Materials Science.
9. Reviewer – Physica B: Physics of Condensed Matter
10. Coatings Journal, MDPI

NATIONAL RESEARCH GRANTS

1. New hybrid proteic nanostructures for a specific traject in the tumor cells of the colon – PN-III-P2.-2.1-PED-2021-1323, funded by UEFISCDI – member of the research team
2. Microbial fuel cells (MFC) with continuous and discontinuous operation - an eco-friendly method for wastewater treatment and autonomous electricity generation – 370PED/2020, funded by UEFISCDI – member of the research team
3. Development of photovoltaic devices by nano-imprint lithography – 25/2020, funded by UEFISCDI – project manager
4. Nanostructured back electrodes for highly efficient photovoltaic structures – 115/2020, funded by UEFISCDI – member of the research team
5. Renewable polymers based new durable materials for 3D printing – subproject no. 5 of 40PCCDI/2018 project, funded by UEFISCDI – head of the University of Bucharest research team
6. Graphene/ferroelectric materials heterostructures for advanced nanoelectronic devices – 7PCCF/2018, funded by UEFISCDI – member of the research team
7. Nanostructures for quantum and plasmonic computing – 35/2017, funded by UEFISCDI – member of the research team
8. Multi-layer photovoltaic structures for space applications – 288/2014, funded by UEFISCDI – member of the research team
9. High efficiency electrospinning – 159/2012, funded by UEFISCDI – member of the research team
10. Analogies between electron transport and propagation of light, in nanostructures – 3-0224/2011, funded by UEFISCDI, member of the research team
11. Photovoltaic cells for space applications – 81-030/2007, funded by UEFISCDI, member of the research team

INTERNATIONAL RESEARCH GRANTS

1. Elastomeric tuneable metasurfaces for efficient spectroscopic sensors for plastic detection – 5SEE/2019, funded by Ministry of National Education-Research Department, member of the research team
2. Perovskites for photovoltaic efficient conversion technology – 8SEE/2014, funded by Ministry of National Education-Research Department, member of the research team
3. Optoelectronic properties of third generation flexible organic photovoltaic cells based on conjugated polymers – 403/2010, funded by Ministry of National Education-Research Department, member of the

research team

4. Electronic and optical properties of bulk-heterojunction organic solar cells – 5CB/2008, funded by Ministry of National Education-Research Department, member of the research team

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