

INFORMAȚII PERSONALE

Vizireanu Sorin Ionut



📍 Institutul National pentru Fizica Laserilor, Plasmei si Radiatiei, Magurele, Ilfov, Romania.

☎ tel. : (+4) 021 45 74 470; 📠 0723083553;

🆔 ORCID <https://orcid.org/0000-0001-9165-0962>;

Researcher ID <http://www.researcherid.com/rid/B-7791-2009>

✉ sorin.vizireanu@infipr.ro; s_vizi@infim.ro

<http://plasmatic.infipr.ro/people.html>

Sexul M | Data nașterii 24/10/1976 | Naționalitatea Romana

LOCUL DE MUNCA PENTRU
CARE SE CANDIDEAZĂInstitutul National pentru Fizica Laserilor, Plasmei si Radiatiei
Cercetator Stiintific I

EXPERIENȚA PROFESIONALĂ

Perioada: 03/2020- prezent:
11/2021 – 04/2022:

Cercetator Stiintific I;
Adjunct Sef laborator Plasma de Temperatura Joasa in INFLPR;

08/2014 - 03/2020:
01/2017- 06/2017:

Cercetator Stiintific II;
Sef laborator Plasma de Temperatura Joasa in INFLPR;

08/2008 - 07/2014:

Cercetator Stiintific III;

07/2004 - 07/2008:

Cercetator Stiintific ;

12/2000 - 06/2004:

Asistent Cercetare Stiintifica.

Institutul National pentru Fizica Laserilor, Plasmei si Radiatiei -INFLPR, www.infipr.ro

Experienta dobandita:

- Experienta in domeniul procesarii (depuneri si tratamente) cu plasma la presiune scazuta, la presiune atmosferica si cu plasma imersata in lichid a unor nanomateriale carbonice (nanofibre, nanowall-uri de carbon, grafene). Investigarea plasmelor folosite la depunerea si tratarea materialelor;
- Testarea de aplicatii ale nanomaterialelor sintetizate si/sau tratate in plasma;
- Proiectarea si realizarea de configuratii experimentale de descarcari in gaze (surse de plasma de tip jet, cu electrozi plan-paraleli, magnetron) folosite la depunerea si tratarea filmelor subtiri;
- Activitati de procesare si interpretare a masuratorilor spectrale si de caracterizare a materialelor.
- Propunerea si conducerea de proiecte de cercetare, diseminarea rezultatelor

Sectorul de activitate Cercetare Stiintifica

EDUCAȚIE ȘI FORMARE

Perioada 10/2010-03/2013:

Studii postdoctorale in domeniul nanomaterialelor
POSDRU/89/1.5/S/54785

ISCED 6

Universitatea Politehnica din Bucuresti si Universitatea Petrol-Gaze din Ploiesti

- Sinteza si tratarea in plasma a nanostructurilor carbonice

10/2001-09/2008:

Doctor in Fizica, distinctia *Summa Cum Laude*

ISCED 6

Universitatea Bucuresti, Facultatea de Fizica

- Tema "Materiale carbonice obtinute prin tehnici cu plasma"

Stagii de lucru in strainatate:

ISCED 6

21/01 - 6/03/2003.

-Hacettepe University Ankara, Turkey, proiect 527- Plasma Polymers and Related Materials;

21/01 - 6/03/2003:

-Institute of Physics, Slovak Academy of Sciences, Department of Multilayers, proiectului FP5 al UE – Improving Human Potential RTN-1999-00267.

10/1999-03/2001:

Studii Postuniversitare de Specializare in domeniul Informatica

ISCED 6

Universitatea Petrol-Gaze din Ploiesti,

Tema: "Comunicatii de date pe retele de mare viteza".

10/1999-02/2001:

Master, Universitatea Bucuresti, Facultatea de Fizica, specializare Fizica Atomului, Moleculei si Astrofizicii

ISCED 6

- Cursuri si seminarii masterat, sustinere diploma

10/1995-06/1999:

Absolvire Universitatea Bucuresti, Facultatea de Fizica, specializare Fizica Atomului, Moleculei si Astrofizicii

ISCED 5

- Cursuri si seminarii, examen licenta, sustinere diploma

09/1991-06/1995:

Bacalaureat

ISCED 4

Liceul teoretic "N. Iorga" Valenii de Munte, Prahova

- profil Matematica-Fizica

COMPETENTE PERSONALE

Limba maternă

Romana

Alte limbi străine cunoscute

	INTELEGERE		VORBIRE		SCRIERE
	Ascultare	Citire	Participare la conversație	Discurs oral	
Engleza	C1	C1	C1	C1	C1
Franceza	A2	A2	A1	A1	

Niveluri: A1/A2: Utilizator elementar - B1/B2: Utilizator independent - C1/C2: Utilizator experimentat
[Cadru european comun de referință pentru limbi străine](#)

Competențe de comunicare

- Comunicare buna cu membrii echipei. Capacitate mare de munca si intelegere chiar si in conditii de stres. Usor adaptabil la lucru cu persoane si situatii noi

Competențe organizaționale/manageriale

Adjunct Sef laborator Plasma de Temperatura Joasa din INFLPR intre 11/2021-04/2022.
Sef de laborator „Plasma la Temperatura Joasa” din INFLPR, intre 01/2017-06/2017

Competente management dovedite prin castigarea de contracte de cercetarea si participarea la numeroase proiecte nationale și internationale:

- director proiect:** Funcționalizarea în plasmă a nanowall-urilor de carbon pentru controlul superhidrofobiei și al atasării nanoparticulelor și entităților biologice, TE228/2010 perioada 2010-2013;
- director proiect component 4**-PCCDI33/PN-III-P1-1.2-PCCDI-2017-0637, perioada 2018-2020;
- director proiect component 3**-PCCDI80/PN-III-P1-1.2-PCCDI-2017-0387, perioada 2018-2020;
- 7 proiecte ca responsabil** din partea INFLPR:
- Polygraph/PN-II-PCCA-140/2013, perioada 2013-2016;
- Nano-Coat/PN-II-PT-PCCA-253-2014, 7/2014–06/2016;
- EV-Bat/PN-II-PT-PCCA-220-2014, 07.2014–06.2016;
- PED112/2017- CELLAB-SLP/PN-III-P2-2.1-PED-2016-0287, 01/2017-06/2018;
- PCCDI39 PN-III-P1-1.2-PCCDI-2017-0407, INTELMAT, 10/2018-06/2021.
- PED271/2021- PlasmaDent, PN-III-P2-2.1-PED-2019-4569, 08/2020-08/2022.
- PED632/2022- BIOPLASM, PN-III-P2-2.1-PED-2021-2559, 08-2022-12/2023.

Informatii Suplimentare
06/2018-05/2022:

Membru in Consiliul Stiintific al INFLPR

Membru in comitetul de organizare a unor evenimente stiintifice internationale:

- A 14 - a Conferinta Internationala de Fizica Plasmei si Aplicatii, Brasov, Romania, 14-18/09/2007;
- A 16 - a Conferinta Internationala de Fizica Plasmei si Aplicatii, Magurele, Romania, 20-25/06/2013;
- A 17 - a Conferinta Internationala de Fizica Plasmei si Aplicatii, Magurele, Romania, 15-20/06/2017.

Competențe dobândite la locul de muncă

Aptitudini tehnice dobandite in diferite laboratoare de cercetare despre tehnica vidului, fizica materialelor fizica plasmei, precum si de diagnostica plasmelor.

- folosirea tehnologiilor cu plasma pentru depunerea de filme subtiri si de nanostructuri carbonice.
- folosirea tehnologiilor cu plasma pentru tratarea diferitelor materiale
- proiectarea si realizarea de configuratii experimentale de descarcari in gaze (surse de tip jet, cu electrozi plan-paraleli, magnetron).
- procesarea si interpretarea masuratorilor spectrale si a caracterizarilor de materiale prin tehnicile FTIR, XRD, XRR, EDX, SEM, TEM, AFM, UV-Vis, XPS, Raman si unghi de contact.

Competență digitală

AUTOEVALUARE				
Procesarea informației	Comunicare	Creare de conținut	Securitate	Rezolvarea de probleme
Utilizator experimentat	Utilizator experimentat I	Utilizator experimentat	Utilizator experimentat	Utilizator experimentat

Niveluri: Utilizator elementar - Utilizator independent - Utilizator experimentat
 Competentele digitale - Grilă de auto-evaluare

- Windows, Linux, Office, Origin, Corel Draw, CASA XPS, Adobe Photoshop, configurare si instalare calculatoare etc

Permis de conducere

Categoria B

INFORMATII SUPLIMENTARE



- Brevete inventie:**
1. I. 4. C. Ghica; L. C. Nistor; V. S. Teodorescu; S. Vizireanu; N. D. Scarisoreanu/ Inducing Hydrogen into RF plasma and laser processing of structural fault in silicon in order to transfer mono-crystalline layers with thicknesses under 50 nm/National patent. RO125409-A0/10/09/2009.
 2. . S. Apostol; F. Bacalum; R. Birjega; B. Cojocaru; D. Cosasu; V. Dragut; A. Florea; M. Florea; I. A. Gradinaru; T. Iordache; E. L. Mara; A. G. Olaru; A. L. Radu; T. Sandu; A. Sarbu; L. Sarbu; T. Valea; S. Vizireanu; A. Zaharia; R. Zavoianu/ Process for preparing ceramic foams based on red mud consists of in gelling composition consisting of aqueous suspension of red mud/ RO131328-A2_30/08/2016;
 3. Junkar; M. Modic; A. Vesel; Gh. Dinescu; S. Vizireanu; S.-D. Stoica; K. S. Kleinschek; M. Mozetic /Method of growing carbon nanowalls on a substrate/ WO2016059024-A1-21/04/2016 and EP3206728-A1_23/08/2017.
 4. D. Panaitescu; A. N. Frone; I. Chiulan; C. A. Nicolae; S. Vizireanu; M. D. Ionita; E. R. Ionita; G. Dinescu/ Procedeu de tratare a micro si nanocelulozei folosind plasma imersata in lichid si procedeu de obtinere a nanocompozitelor din biopolimer si celuloza tratata/ A00177/13/03/2018.
 5. A. M. I. Trefilov, S. Vizireanu, B. I. Bita, I. Stamatina, G. Dinescu, Procedeu de obtinere a ansamblelor membrană-electrod-strat de difuzie a gazului pe bază de nanopereți de grafene depuși în plasmă pentru pile de combustie performante, OSIM A/00635/13.10.2020

Participarea, in calitate de co-autor, la conferinte nationale si internationale cu un numar de peste 100 de contributii stiintifice (poster sau prezentari orale).

- Premii** Premiul Academiei Romane "DRAGOMIR HURMUZESCU" in fizica anul 2012, acordat lui G. Dinescu, S. Vizireanu, B. Mitu pentru grupul de lucrari: Contribuții la sinteza și caracterizarea structurilor grafenice tip pereți nanometrici de carbon

Peste 65 de publicatii ISI

1. B. Mitu , **S. Vizireanu**, C. Petcu, G. Dinescu, M. Dinescu, R. Birjega, V.S. Teodorescu, Carbon material deposition by remote RF plasma beam, Surface and Coatings Technology 180, 238-243, 2004.
2. **S. Vizireanu**, B. Mitu, G. Dinescu, Nanostructured carbon growth by expanding RF plasma assisted CVD on Ni-coated silicon substrate, Surface and Coatings Technology 200, 1132– 1136, 2005.
3. G. Dinescu, **S. Vizireanu**, C. Petcu, B. Mitu, M. Bazavan, I. Iova, Spectral characteristics of a radiofrequency nitrogen plasma jet continuously passing from low to atmospheric pressure, Journal of Optoelectronics and Advanced Materials, 7, 5, 2477 – 2480, 2005.
4. B. Mitu, **S. Vizireanu**, R. Birjega, M. Dinescu, S. Somacescu, P. Osiceanu, V. Părvulescu, G. Dinescu, Comparative properties of ternary oxides of ZrO₂-TiO₂-Y₂O₃ obtained by laser ablation, magnetron sputtering and sol-gel techniques, Thin Solid Films 515, 6484–6488, 2007.
5. **S. Vizireanu**, B. Mitu, G. Dinescu, L. Nistor, C. Ghica, A. Maraloiu, M. Stancu, G. Ruxanda, Varieties of nanostructured carbon grown by expanding radiofrequency plasma beam, Journal of Optoelectronics and Advanced Materials 9, 6, 1649 – 1652, 2007.
6. A. Malesevic, **S. Vizireanu**, R. Kemps, A. Vanhulsel. C. Van Haesendonck , G. Dinescu, Combined growth of carbon nanotubes and carbon nanowalls by plasma-enhanced chemical vapor deposition, Carbon 45, 2932–2937, 2007.
7. **S. Vizireanu**, L. Nistor, M. Haupt, V. Katzenmaier, C. Oehr, G. Dinescu, Carbon Nanowalls Growth by Radiofrequency Plasma-Beam-Enhanced Chemical Vapor Deposition, Plasma Processes and Polymers 5, 263-268, 2008.
8. G. Ruxanda, M. Stancu, **S. Vizireanu**, G. Dinescu, D. Ciuparu, Varieties of carbon nanostructures obtained by the AC arc discharge method, Journal of Optoelectronics and Advanced Materials 10, 8, 2047-2051, 2008.
9. **S. Vizireanu**, G. Dinescu, D. Stoica, R. Birjega, C. Ghica, V. Teodorescu, L. Nistor, R. Ganea, Fe-catalyzed carbon nanotubes growth on fluidized powders by remote radiofrequency plasma beam, Journal of Optoelectronics and Advanced Materials 10, 8, 2056-2060, 2008.
10. I. Luciu, **S. Vizireanu**, T. Acsente, E. R. Ionita, B. Mitu, G. Dinescu, Investigation of radiofrequency plasma jets at low and atmospheric pressure by optical emission spectroscopy, Journal of Optoelectronics and Advanced Materials , 10, 8, 2015-2019, 2008.
11. G. Dinescu, B. Mitu, **S. Vizireanu**, E. R. Ionita, I. Luciu, M.D. Ionita, C. Stancu, C.E. Stancu, T. Acsente, L. Nistor, L. Kravets, Materials processing with radiofrequency plasmas at low and atmospheric pressure, Romanian Reports in Physics 60, 3, 67, 2008.
12. **S. Vizireanu**, S. D. Stoica, B. Mitu, M.A. Husanu, A. Galca, L. Nistor, G. Dinescu, Radiofrequency plasma beam deposition of various forms of carbon based thin films and their characterization, Applied Surface Science 255, 5378–5381, 2009.
13. R. Birjega, **S. Vizireanu**, G. Dinescu, L.C. Nistor, R. Ganea, The effect of textural properties of the gamma-Al₂O₃:Ni catalyst template on the nanostructured carbon grown by PECVD, Superlattices and Microstructures 46, 297-301, 2009.
14. C. Ghica, L.C. Nistor, M. Stefan, D. Ghica, B. Mironov, **S. Vizireanu**, A. Moldovan, M. Dinescu, Specificity of defects induced in silicon by RF-plasma hydrogenation, Applied Physics A 98, 4, 777-785, 2010.
15. C. Ghica, L. C. Nistor, B. Mironov, **S. Vizireanu**, Hydrogen-plasma induced platelets and voids in silicon wafers, Romanian Reports in Physics 62, 329-340, 2010.
16. E.C. Stancu, M.D. Ionita, **S. Vizireanu**, A.M. Stanciu, L. Moldovan, G. Dinescu, Wettability properties of carbon nanowalls layers deposited by a radiofrequency plasma beam discharge, Materials Science and Engineering B 169, 119-122, 2010.
17. **S. Vizireanu**, S.D. Stoica, C. Luculescu , L.C. Nistor, B. Mitu, G. Dinescu, Plasma techniques for nanostructured carbon materials synthesis. A case study: carbon nanowall expanding RF plasma, Plasma Sources Science and Technology 19, 034016, 2010.
18. C. Ghica, L.C. Nistor, **S. Vizireanu**, G. Dinescu, A. Moldovan, M. Dinescu, Skin Layer Defects in Si by Optimized Treatment in Hydrogen RF Plasma, Plasma Processes and Polymers, 7, 986, 2010.
19. C. Ghica, L.C. Nistor, V. S. Teodorescu, A. Maraloiu, **S. Vizireanu**, N. D. Scarisoreanu, M. Dinescu, Laser treatment of plasma-hydrogenated silicon wafers for thin layer exfoliation, Journal of Applied Physics 109, 063518, 2011.
20. C Ghica, L C Nistor, **S Vizireanu** and G Dinescu, Annealing of hydrogen-induced defects in RF-plasma-treated Si wafers: ex situ and in situ transmission electron microscopy studies, Journal of Physics D: Applied Physics 44 295401, 2011.
21. **S. Vizireanu**, M. D. Ionita, G. Dinescu, I. Enculescu, M. Baibarac, I. Baltog, Post-synthesis Carbon Nanowalls Transformation under Hydrogen, Oxygen, Nitrogen, Tetrafluoroethane and Sulfur Hexafluoride Plasma Treatments, Plasma Processes and Polymers 9, 363, 2012.
22. **S. Vizireanu**, B. Mitu, C.R. Luculescu L.C. Nistor, G. Dinescu, PECVD synthesis of 2D nanostructured carbon material, Surface and Coatings

- Technology 211, 2, 2012.
23. Z. Gonzalez, **S. Vizireanu**, Gheorghe Dinescu, C. Blanco, R. Santamaria, Carbon Nanowalls thin films as nanostructured electrode materials in Vanadium Redox Flow Batteries, *Nano Energy* 1, 833-839, 2012.
 24. **S. Vizireanu**, G. Dinescu, L.C. Nistor, M. Baibarac, G. Ruxanda, M. Stancu, D. M. Ciuparu, Stability of carbon nanowalls against chemical attack with acid solutions, *Physica E: Low-Dimensional Systems and Nanostructures*, 47, 59, 2013.
 25. A. Achour, B. Belkerk, K. A. Aissa, **S. Vizireanu**, E. Gautron, M. Carette, P-Y. Jouan, G. Dinescu, L. Le Brizoual, Y. Scudeller, M-A. Djouadi, Thermal properties of carbon nanowalls layers measured by pulsed photothermal technique, *Applied Physics Letters* 102, 061903, 2013.
 26. A. Marcu, I. Enculescu, **S. Vizireanu**, R. Birjega, C. Porosnicu, Single crystal ZnO nanowire luminescence shifting by nanostructured ZnO layers, *Digest Journal of Nanomaterials and Biostructures* 8, 597-605, 2013.
 27. A. Achour, **S. Vizireanu**, G. Dinescu, Le Brizoual, M-A. Djouadi, M. Boujitta, Electrochemical anodic oxidation of nitrogen doped carbon nanowall films: X-ray photoelectron and Micro-Raman spectroscopy study, *Applied Surface Science* 273, 49–57, 2013.
 28. **S. Vizireanu**, A. Lazea Stoyanova, M. Filipescu, D.-L. Cursaru, G. Dinescu, Carbon nanowalls as suitable layers for lubricity improvement, *Digest Journal of Nanomaterials and Biostructures* 8, 1145 - 1156, 2013.
 29. E. C. Stancu, A.-M. Stanciuc, **S. Vizireanu**, C. Luculescu, L. Moldovan, A. Achour, G. Dinescu, Plasma functionalization of carbon nanowalls and its effect on attachment of fibroblast-like cells, *Journal of Physics D: Applied Physics* 47, 265203, 2014.
 30. D. L. Cursaru, **S. Vizireanu**, S. Mihai, D. Ghita, S. D. Stoica, G. Dinescu, Friction and wear properties of carbon nanowalls coatings, *Digest Journal of Nanomaterials and Biostructures* 9, 1105-1114, 2014.
 31. A. Lazea-Stoyanova, M. Enculescu, **S. Vizireanu**, V. Marascu, G. Dinescu, Effects of process parameters on growth of metal particles by atmospheric pressure plasma jet, *Digest Journal of Nanomaterials and Biostructures* 9, 1241-1247, 2014.
 32. T.M. Dinh, A. Achour, **S. Vizireanu**, G. Dinescu, L. Nistor, A. Armstrong, D. Guay, D. Pech, Hydrous RuO₂/carbon nanowalls hierarchical structures for all-solid-state ultrahigh-energy-density micro-supercapacitors, *Nano Energy* 10, 288-294, 2014.
 33. R. Ion, **S. Vizireanu**, C. E. Stancu, C. Luculescu, A. Cimpean, G. Dinescu, Surface plasma functionalization influences macrophage behavior on carbon nanowalls, *Materials Science Engineering C: Materials for Biomedical Applications* 48, 118-125, 2015.
 34. M. Mozetic, A. Vesel, S.D. Stoica, **S. Vizireanu**, G. Dinescu, R. Zaplotnik, Oxygen atom loss coefficient of carbon nanowalls, *Applied Surface Science* 333, 207-213, 2015.
 35. C. Constantinescu, **S. Vizireanu**, V. Ion, G. Aldica, S.D. Stoica, A. Lazea-Stoyanova, A.-P. Alloncle, P. Delaporte, G. Dinescu G, Laser-induced forward transfer of carbon nanowalls for soft electrodes fabrication, *Applied Surface Science* 374, 49–55, 2016.
 36. A. Palla Papavlu, M. Filipescu, **S. Vizireanu**, L. Vogt, S. Antohe, M. Dinescu, A. Wokaun, T. Lippert, Laser-induced forward transfer of hybrid carbon nanostructures, *Applied Surface Science* 374, 312–317, 2016.
 37. M.D. Ionita, **S. Vizireanu**, S. D. Stoica, M. Ionita, A. M. Pandeale, A. Cucu, I. Stamatin, L. C. Nistor, G. Dinescu, Functionalization of carbon nanowalls by plasma jet in liquid treatment, *European Physical Journal D* 70, 31, 2016.
 38. R. Ion, **S. Vizireanu**, C. Luculescu, A. Cimpean, G. Dinescu, Vertically, interconnected carbon nanowalls as biocompatible scaffolds for osteoblast cells, *Journal of Physics D: Applied Physics* 49, 274004, 2016.
 39. V. Satulu, M.D. Ionita, **S. Vizireanu**, B. Mitu, G. Dinescu, Plasma processing with fluorine chemistry for modification of surfaces wettability, *Molecules* 21, 1711, 2016.
 40. Z. Ben Cheikh, F. El Kamel, O. Gallot-Lavallée, M. A. Soussou, **S. Vizireanu**, A. Achour, K. Khirouni, Hydrogen doped BaTiO₃ films as solid-state electrolyte for micro-supercapacitor applications, *Journal of Alloys and Compounds*, 721, 276-284, 2017.
 41. H. Achour, A. Achour, S. Solyamani, M. Islam, **S. Vizireanu**, A. Aman, A. Ahmadpourian, G. Dinescu, Plasma surface functionalization of boron nitride nano-sheets, *Diamond and Related Materials* 77, 110-115, 2017.
 42. **S. Vizireanu**, M.D. Ionita, R.E. Ionita, S. D. Stoica, C. M. Teodorescu, M. A. Husanu, N. G. Apostol, M. Baibarac, D. Panaitescu, G. Dinescu, Aging phenomena and wettability control of plasma deposited carbon nanowall layers, *Plasma Processes and Polymers* 14, 1700023, 2017.
 43. Gentoiu, MA; Betancourt-Riera, R; Vizireanu, S; Burducea, I; Marascu, V; Stoica, SD; Bita, BI; Dinescu, G; Riera, R; "Morphology, Microstructure, and Hydrogen Content of Carbon Nanostructures Obtained by PECVD at Various Temperatures"; *JOURNAL OF NANOMATERIALS* , 1374973 (2017).
 44. Panaitescu, DM; Vizireanu S; Nicolae, C. A; Frone A. N; Casarica A; Carpen L. G; Dinescu G; "Treatment of Nanocellulose by Submerged Liquid Plasma for Surface Functionalization"; *Nanomaterials* 8, 467 (2018).
 45. Stoica, SD; Vizireanu, S; Acseste, T; Dinescu, G; "Hybrid Nanomaterial Architectures: Combining Layers of Carbon Nanowalls, Nanotubes, and Particles"; *PLASMA CHEMISTRY AND PLASMA PROCESSING* (38) 695-706 (2018).
 46. Achour, A; Islam, M; Solyamani, S; Vizireanu, S; Saeed, K; Dinescu, G.; "Influence of plasma functionalization treatment and gold nanoparticles on surface chemistry and wettability of reactive-sputtered TiO₂ thin films"; *APPLIED SURFACE SCIENCE* (458) 678-685 (2018)
 47. Vizireanu, S; Panaitescu, DM; Nicolae, CA; Frone, AN; Chiulan, I; Ionita, MD; Satulu, V; Carpen, LG; Petrescu, S; Birjega, R; Dinescu, G; "Cellulose defibrillation and functionalization by plasma in liquid treatment"; *SCIENTIFIC REPORTS* 8, 15473 (2018).
 48. Mihai, S; Cursaru, DL; Matei, D; Dinescu, A; Stoica, SD; Vizireanu, S; Dinescu, G; " Carbon nanowalls decorated with gold nanoparticles for surface-enhanced raman spectroscopy"; *Digest Journal of Nanomaterials and Biostructures* 13 (3) 743-749 (2018).
 49. Guerra, A; Achour, A; Vizireanu, S; Dinescu, G; Messaci, S; Hadjersi, T; Boukherroub, R; Coffinier, Y; Pireaux, JJ; "ZnO/Carbon nanowalls shell/core nanostructures as electrodes for supercapacitors"; *APPLIED SURFACE SCIENCE* 481, 926-932 (2019).
 50. Alin, CD; Grama, F; Papageorghe, R; Brajnicov, S; Ion, V; Vizireanu, S; Palla-Papavlu, A; Dinescu, M; "Tuning the physicochemical properties of hernia repair meshes by matrix-assisted pulsed laser evaporation"; *APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING* 125 (6) 424 (2019).
 51. Achour, A; Islam, M; Vizireanu, S; Ahmad, I; Akram, MA; Saeed, K; Dinescu, G; Pireaux, JJ; "Orange/Red Photoluminescence Enhancement Upon SF₆ Plasma Treatment of Vertically Aligned ZnO Nanorods"; *NANOMATERIALS* 9 (5) 794 (2019).
 52. Achour, A; Solyamani, S; Vizireanu, S; Baraket, A; Vesel, A; Zine, N; Errachid, A; Dinescu, G; Pireaux, JJ; "Effect of nitrogen configuration on carbon nanowall surface: Towards the improvement of electrochemical transduction properties and the stabilization of gold nanoparticles"; *MATERIALS CHEMISTRY AND PHYSICS* 228, 110-117 (2019).
 53. Stancu, EC; Vizireanu, S; Quade, A; Stanciuc, AM; Moldovan, L; Dinescu, G; "MODIFICATION OF CARBON NANOWALLS USING LOW PRESSURE PLASMA TO ENHANCE THE FIBROBLAST ATTACHMENT"; *ROMANIAN JOURNAL OF PHYSICS* 64 (43894) 504 (2019).
 54. Cursaru, D.L; Giagkasa, N; Vizireanu, S; Mihai, S; Matei, D; Biță, B; Stancu, C; Manta, A.M; Ramadan, I; Improvement of antiwear properties by coating the steel surfaces and by lubricant addition; *Digest Journal of Nanomaterials and Biostructures* 14, 907-915, (2019).
 55. Panaitescu, DM; Vizireanu, S; Stoian, SA; Nicolae, CA; Gabor, AR; Damian, CM; Trusca, R; Carpen, LG; Dinescu, G; "Poly(3-hydroxybutyrate) Modified by Plasma and TEMPO-Oxidized Celluloses"; *POLYMERS* 12 (7) 1510 (2020)
 56. Yehia, SA; Zarif, ME; Bita, BI; Teodorescu, M; Carpen, LG; Vizireanu, S; Petrea, N; Dinescu, G; "Development and Optimization of Single Filament Plasma Jets for Wastewater Decontamination"; *PLASMA CHEMISTRY AND PLASMA PROCESSING* 40(6), 1485-1505 (2020)
 57. S.D. Stoica, S. Vizireanu, C.R. Luculescu, B. Mitu, G. Dinescu, Metastable growth regime for carbon nanowalls and carbon nanofibers in an 2 Ar/H₂/C₂H₂ radiofrequency plasma jet, *Plasma Sources Science and Technology* 29(10), 105007 (2020). "

58. Bită, B; Vizireanu, S; Stoica, D; Ion, V; Yehia, S; Radu, A; Iftimie, S; Dinescu, G; On the Structural, Morphological, and Electrical Properties of Carbon Nanowalls Obtained by Plasma-Enhanced Chemical Vapor Deposition, *Journal of Nanomaterials*, 8814459 (2020).
59. Giagkas, N.; Micu, I. F.; Vizireanu, S.; Vasile, N.; Bită, B., I; Satulu, V; Mihai, S.; Manta, A. M.; Cursaru, D. L.; Tribological properties of ZrN coatings deposited by magnetron sputtering in reactive and non-reactive mode, *Digest Journal of Nanomaterials and Biostructures* 16 (2) 659-667 (2021).
60. Carpen, L G; Acseste, T; Satulu, V; Matei, E; Vizireanu, S; Bită, B I; Dinescu, G; Hybrid Nanostructures Obtained by Transport and Condensation of Tungsten Oxide Vapours onto CNW Templates, *Nanomaterials* 11(4),835 (2021).
61. Chiulan, I; Panaitescu, D M; Radu, E-R; Vizireanu, S; Satulu, V; Bită, B; Gabor, R Au; Nicolae, C A; Raduly, M; Raditoiu, V"; Influence of TEMPO oxidation on the properties of ethylene glycol methyl ether acrylate grafted cellulose sponges, *Carbohydrate Polymers* 272, 118458 (2021).
62. Danes, CA; Dumitriu, C; Vizireanu, S; Bită, B; Nicola, IM; Dinescu, G; Pirvu, C; "Influence of Carbon Nanowalls on Copper Deposition for Electrostatic Conductive Coatings"; *Coatings* 11 (11) 1395 (2021).
63. Zarif, M.E; Yehia, S.A; Bită, B; Satulu, V; Vizireanu, S; Dinescu, G; Holban, A.M; Marinescu, F; Andronescu, E; Grumezescu, A.M; Birca, A.C; Farcasiu, A.T; "Atmospheric Pressure Plasma Activation of Hydroxyapatite to Improve Fluoride Incorporation and Modulate Bacterial Biofilm"; *International Journal of Molecular Sciences* 22 (23) 13103 (2021)
64. Marcu, M; Preda, L; Vizireanu, S; Bită, B; Mihai, MA; Spataru, T; Acseste, T; Dinescu, G; Spataru, N; "Enhancement of the capacitive features of WO₃ supported on pristine and functionalized graphite by appropriate adjustment of the electrodeposition regime"; *Materials Science & Engineering B: Solid-State Materials for Advanced Technology* 277, 115585 (2022).
65. Yehia, SA; Petrea, N; Grigoriu, N; Vizireanu, S; Zarif, ME; Carpen, LG; Ginghina, RE; Dinescu, G; "Organophosphorus toxic compounds degradation in aqueous solutions using single filament dielectric barrier discharge plasma jet source"; *Journal of Water Process Engineering* 46, 102637 (2022).
66. Palla-Papavlu A., Vizireanu S., Filipescu M., Lippert T., High-Sensitivity Ammonia Sensors with Carbon Nanowall Active Material via Laser-Induced Transfer, *Nanomaterials* 12 (16) 2830 (2022).

Data: 17/10/2022

Dr. Vizireanu Sorin Ionut