

INFORMAȚII PERSONALE



Osiac Mariana

Strada Imparatul Traian, nr. 43, Bl. 1, Sc.1, Ap. 4, Craiova, Romania

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mariana71osiac@gmail.com

Sexul Feminin

Data nașterii 22 Octombrie 1971

Naționalitatea Romana

EXPERIENȚA PROFESIONALĂ

Perioada	1996-1999
Pozitia ocupata	Asistent de cercetare
Principalele activitati si responsabilitati	cercetare
Numele si adresa angajatorului	INFLPR, Magurele, strada Atomistilor 402
Perioada	1999-2002
Pozitia ocupata	Doctorand
Principalele activitati si responsabilitati	cercetare
Numele si adresa angajatorului	Institutul de plasma de joasa temperatura/ Universitatea Ernst-Moritz-Armdt Greifswald, Germania
Perioada	2003-2004
Pozitia ocupata	Postdoctorand
Principalele activitati si responsabilitati	Cercetare/predare
Numele si adresa angajatorului	Institutul de Fizica/Universitatea Ruhr Bochum
Perioada	2005-2009
Pozitia ocupata	Lector Dr.
Principalele activitati si responsabilitati	Predare/cercetare
Numele si adresa angajatorului	Universitatea din Craiova
Perioada	2009-prezent
Pozitia ocupata	Conferentiar Dr.
Principalele activitati si responsabilitati	Predare/cercetare
Numele si adresa angajatorului	Universitatea din Craiova

EDUCAȚIE ȘI FORMARE

Perioada	1990-1995
Calificare/diploma obtinuta	Licentiat in fizica
Numele si tipul institutiei de invatamant	Universitatea din Bucuresti
Perioada	1996-1997
Calificare/diploma obtinuta	Diploma Studii Aprofundate
Numele si tipul institutiei de invatamant	Universitatea din Bucuresti
Perioada	1999-2002
Calificare/diploma obtinuta	Diploma de doctor in fizica
Numele si tipul institutiei de invatamant	Universitatea Ernst-Moritz-Amdt Greifswald Germania
Titlul tezei de doctorat	Spectroscopic studies of microwave plasmas generated in diboran and acetilene

AFFILIERI LA SOCIETATU PROFESIONALE SI STIINTIFICE	Membru al Societatii Romane de Fizica
	Membru al Societatii Romane de Biofizica

COMPETENTE PERSONALE

Limba(i) maternă(e) Romana

Alte limbi străine cunoscute

Limba Engleza

INTELEGERE		VORBIRE		SCRIERE
Ascultare	Citire	Participare la conversație	Discurs oral	
C1	C2	C2	C2	C1

Competențe de comunicare ▪ Buna capacitate de comunicare, spirit de echipa.

Competențe organizaționale/managieriale	▪ Experiența bună a managementului de proiecte și al echipei în calitate de coordonator al contractelor de cercetare obținute cu înaltă calitate internațională și națională câștigate prin competiție
Competențe dobândite la locul de muncă	▪ Capacitatea de a organiza și realiza experimente în domeniul fizicii materialelor, studii spectroscopice, difracție de raze X, depunerii de filme subțiri, optometrie, etc.
Competențe și cunoștințe de utilizare a calculatorului	▪ Microsoft Office, Corel, Origin, Adobe Photoshop
Permis de conducere	Categoria B
Stagii ERASMUS	Universitatea Lille 1, martie 2010-2012 Universitatea din Granada, decembrie 2018
Proiect Mobilitatea	Universitatea din Kassel, noiembrie 2019
Competențe și Aptitudini Organizatorice	Noaptea Cercetătorilor, RNRscience escape from laboratory 609771 -2013 Noaptea Cercetătorilor, RNR RoTalkScience 633311-2014 Noaptea Cercetătorilor, RNR RoTalkScience 633311-2015
Alte competențe	<hr/> Certificat de antreprenorat
Informații suplimentare	Director de proiect/Responsabil de proiect (cercetare): 8 Director de proiect (internațional): 1 Responsabil de proiect de popularizare a științei (Noaptea Cercetătorilor):3 Publicații științifice: 28 Autor și coautor monografii științifice/caiete de laborator: 4 Participări la conferințe: peste 30/ prezentări orale 6 Referent teze de doctorat: 6 Revizor la jurnale științifice: Ceramics International, Journal of optoelectronics and advanced materials, Applied Physics A Citări peste 200 în reviste indexate Web of Science și Scopus

ANEXE

JURNALE COTATE ISI

1. **M. Osiac**, J. Roepcke, P. Davies, Infrared laser spectrum of the fundamental band of the boron monoxide free radical, *Chemical Physics Letters*, 344, 1-2, 92-96, 2001
2. J. Roepcke, G. Revalde, **M. Osiac**, K. Li, J. Meichsner, Tunable diode laser absorption studies of hydrocarbons in RF plasmas containing hexamethyldisiloxane, *Plasma Chemistry and Plasma Processing*, 22, 1, 137-157, 2002.
3. **M. Osiac**, BP Lavrov, J. Roepcke, Intensity distributions in R and P branches of (0-0) band of the A(1)Pi-X(1) Sigma (+) electronic transition of the BH molecules and determination of the gas temperature in non-equilibrium plasmas, *Journal of Quantitative Spectroscopy and Radiation Transfer*, 74, 4, 471-491, 2002.
4. BP. Lavrov, **M. Osiac**, AV Pipa, J. Roepcke, On the spectroscopic detection of neutral species in a low-pressure plasma containing boron and hydrogen, *Plasma Sources Science and Technology*, 12, 4, 576-589, 2003.
5. T. Gans, **M. Osiac**, D. O'Connell, VA Kadetov, U. Czarnetzki, T. Schwarz-Selinger, H. Halfmann, P. Awakowicz, Characterization of stationary and pulsed inductively coupled RF discharges for plasma sterilization, *Plasma Physics and Controlled Fusion*, 47, A353-A360, 5A, 2005.
6. **M. Osiac**, T. Schwarz-Selinger, D. O'Connell, B. Heil, ZL Petrovic, MM Turner, T. Ganz, U. Czarnetzki, Plasma boundary sheath in the afterglow of a pulsed inductively coupled RF plasma *Plasma Sources Science and Technology*, 16, 2, 355-363, 2007.
7. E. Osiac, S. Kuch, I. Sokolska, **M. Osiac**, G. Huber, Upconversion avalanche processes in Ho³⁺-Yb³⁺: YLF crystal, *Romanian Reports in Physics*, 60, 4, 937-945, 2008.
8. **M. Osiac**, N. Scarisoreanu, M. Dinescu, AlN thin film deposition using a radio-frequency beam assisted pulsed laser deposition, *Journal of Optoelectronic and Advanced Materials*, 10, 8, 2068-2070, 2008.
9. **M. Osiac**, CC Surdu-Bob, M. Badulescu, CP Lungu, Optical emission spectroscopy diagnostics of a Ni thermionic vacuum arc (TVA) plasma, *Journal of Optoelectronic and Advanced Materials* 10, 8, 2007-2010, 2008.
10. D. Rasleanu, V. Ionescu, G. Prodan, V. Ciupina, CP Lungu, C. Surdu-Bob, **M. Osiac**, O. Pompilian, M. Badulescu, AM Lungu, Nanostructured PZT type thin films prepared by thermionic vacuum arc method, *Journal of Optoelectronic and Advanced Materials*, 10, 11, 3041-3047, 2008.
11. OG pompilian, **M. Osiac**, GE Iacobescu, CP Lungu, Layer coatings of Re and Re-NiCr obtained by thermionic vacuum arc technique, *Journal of Optoelectronic and Advanced Materials*, 11, 11, 1779-1782, 2009.
12. V. Ionescu, CP Lungu, **M. Osiac**, V. Ciupina, Silver containing carbon amorphous nanocomposites films deposited by thermionic vacuum arc technique, *Romanian Journal of Physics*, 55, 1-2, 119-126, 2010.
13. V. Ionescu, **M. Osiac**, CP Lungu, OG Pompilian, I. Jecu, I. Mustata, GE Iacobescu, Morphological and structural investigations of Co-MgF₂ granular thin films grown by thermionic vacuum arc, *Thin Solid Films*, 518, 14, 3945-3948, 2010.
14. S. Georgescu, AM Voiculescu, O. Toma, S. Nastase, C. Matei, **M. Osiac**, Luminiscence of Eu-doped langanite nanopowders synthesized by a citrate sol-gel method, *Journal of Alloys and Compounds*, 507, 2, 470-474, 2010.
15. N. Georgescu, CP Lungu, AR Lupu, **M. Osiac**, Atomic oxygen maximization in high-voltage pulsed cold atmospheric plasma jets, *IEEE Transaction on Plasma Science*, 38, 11, 3156-3162, part 2, 2010.

16. I. Jepu, C. Porosnicu, I. Mustata, CP Lungu, V. Kunkser, **M. Osiac**, GE Iacobescu, V. Ionescu, T. Tudor, Simultaneously thermionic vacuum arc discharges in obtaining ferromagnetic thin films, *Romanian Reports in Physics*, 63, 3, 804-816, 2011.
17. CP Lungu, A. Marcu, C. Porosnicu, I. Jepu, AM Lungu, P. Chiru, C. Luculescu, R. Banici, D. Ursescu, R. Dabu, ID Feraru, CEA Grigorescu, G. Iacobescu, **M. Osiac**, J. Kavac, V. Nemanic, I. Hinkov, S. Farhat, A. Giquel, O. Brinza, Terawatt laser system irradiation of carbon/tungsten bilayers, *Physica Status Solidi (A) Applications and Materials Science*, 209, 9, 1732-1737, 2012.
18. V. Ionescu, CP Lungu, **M. Osiac**, Deposition of tin containing carbon amorphous composite films by thermionic vacuum arc technique, *Optoelectronics and Advanced Materials-Rapid Communications*, 6, 5-6, 592-596, 2012.
19. V. Ionescu, CP Lungu, I. Jepu, **M. Osiac**, GE Iacobescu, Characterization of thermionic vacuum arc deposited Co-MgF₂ granular thin films using X-ray diffraction and microscopy techniques, *Romanian Reports in Physics*, 65, 4, 1390-1397, 2013.
20. **M. Osiac**, V. Tiron, GE Iacobescu, G. Popa, A comparative study of GeSb₂Te₄ films deposited by radiofrequency and pulsed direct current and magnetron sputtering high power impulse magnetron sputtering, *Digest Journal of Nanomaterials and Biostructures*, 9, 2, 451-457, 2014.
21. **M. Osiac**, V. Tiron, GE Iacobescu, The effect of nitrogen on the structure of GeSb₂Te₄ film, *Journal of Optoelectronic and Advanced Materials*, 17, 7-10, 1471-1475, 2015
22. M. Jigau, **M. Osiac**, GE Iacobescu, Influence of the annealing temperature on GeSb₂Te₄ thin film prepared by pulsed laser deposition, *Journal of Optoelectronic and Advanced Materials*, 19, 5, 395-399, 2017.
23. P. Nica, S. Gurlui, **M. Osiac**, M. Agop, M. Ziskind, C. Focsa, Investigation of the femtosecond laser-produced plasma from various metallic targets using the Langmuir probe characteristic, *Physics of Plasmas*, 14, 10, 103119, 2017.
24. **M. Osiac**, The electrical and structural properties of nitrogen GeSb₃Te₄ thin film, *Coatings*, 8, 4, 117, 2018.
25. **M. Osiac**, N. Cioatera, MT Udristoiu, The synthesis of the Tungsten oxide thin film used for gas sensor applications, Conference: 18th Physics Conference (TIM), TIM 18 Physics Conference, Book Series: AIP Conference proceedings volume 2071 article number: UNSP, 040015, 2019
26. **M. Osiac**, N. Cioatera, M. Jigau, Structural, Morphological, and Optical Properties of Iron Doped WO₃ Thin Film Prepared by Pulsed Laser Deposition, *Coatings* 2020, 10(4), 412
27. E. Osiac, S. I. Mitran, C.N. Manea, A. Cojocaru, G.C. Rosu, **M. Osiac**, D.N. Pirici, A.T. Bălșeanu, B. Cătălin, Optical coherence tomography microscopy in experimental traumatic brain injury, *Microscopy Research and technique*, 2020 Oct 3.
28. N. Levinta, MC Corobea, Z. Vuluga, CA Nicolae, AR Gabor, V. Raditoiu, **M. Osiac**, GM teodorescu, M Teodorescu, Bio-Based Polyamide 1010 with a Halogen-Free Flame Retardant Based on Melamine–Gallic Acid Complex, *Polymers* 12, 7, 1482, 2020

LUCRĂRI PUBLICATE ÎN REVISTE ȘI VOLUME DE CONFERINȚE CU REFERENȚI (selectate)

1. **M. Osiac**, T. Schwarz-Selinger, D. O'Connell, B. Heil, T. Ganz, U. Czarnetski, Investigations of the plasma boundary sheath dynamics in the afterglow of a pulsed inductively coupled rf plasma in hydrogen, Seventeenth European Conference on Atomic & Molecular Physics of Ionized Gases, 1-5 September 2004.
2. **M. Osiac**, N. Scarisoreanu, M. Dinescu, Optical emission spectroscopy of radio-frequency beam assisted pulsed laser deposition, 14TH Conference on Plasma Physics and Applications, 14-18 Septembrie 2007, Brasov, Romania.
3. **M. Osiac**, C.C. Surdu-Bob, M. Badulescu, C.P. Lungu, Optical emission spectroscopy diagnostics of a Ni Thermionic Vacuum Arc (TVA) plasma, 14th Conference on Plasma Physics and Applications, 14-18 Septembrie 2007, Brasov, Romania.
4. **M. Osiac**, C.C. Surdu-Bob, C. Iacob, C.P. Lungu, Optimisation of the Re TVA plasma parameters used for deposition, 18th International Symposium on Plasma Chemistry, Kyoto, Japan, August 26th-31st, 2007.
5. C.P. Lungu, A.M. Lungu, C.C. Surdu-Bob, **M. Osiac**, Diagnostic Thermionic of the vacuum arc plasma produced in pure chromium vapors, 18th International Symposium on Plasma Chemistry, Kyoto, Japan, August 26th-31st, 2007.
6. **M. Osiac**, GO Pompilian, S. Gurlui, C. Focsa, Langmuir probe investigations of transient plasma plumes generated by ultrafast laser ablation of various metallic targets, The 4th National Conference of Applied Physics, 19-20 November, 2010.
7. **M. Osiac**, N. Scarisoreanu, V. Ion, M. Dinescu, Thin Film Growth by Radio-Frequency Beam Assisted Pulsed Laser Deposition, COLA 2007, Septembrie 20-27, Spania.
8. C.P. Lungu, C. Porosnicu, I. Jepu, A. M. Lungu, P. Chiru, A. Marcu, C. Luculescu, R. Banici, D. Ursescu, R. Dabu, I. D. Feraru, C. E. A. Grigorescu, G.E. Iacobescu, **M. Osiac**, J. Kovač, V. Nemanič, Nanocomposite Tungsten-Carbon Film Formation by Terawatt Laser System Irradiation, E-MRS 2012 Spring Meeting - The European Material Conference, 2012, Strasbourg, France.
9. **M. Osiac**, V.Tiron, GE Iacobescu, G. Popa, A comparative study of Ge₁Sb₂Te₄ films deposited by radiofrequency and pulsed direct-current and magnetron sputtering high power impulse magnetron sputtering, 16th International Conference on Plasma Physics and Applications, June 20-25, 2013, Magurele, Bucharest, Magurele.
10. I. Jepu, D. Paul, O. G. Pompilian, C. Porosnicu, C. P. Lungu, C. Luculescu, G. Iacobescu, **M. Osiac**, V. Kuncser, Laser influence on multilayer Ag/Ni and Ag/Ce magnetic thin film structures prepared by Thermionic Vacuum Arc technology, Advanced Workshop in Nanophysics and Solar Energy Conversion, September 1-3, 2014, Magurele – Bucuresti, Romania.
11. **M. Osiac**, V. Tiron, GE Iacobescu, The Ge₁Sb₂Te₄ doped nitrogen film deposited by high power impulse magnetron sputtering, ESCAMPIG XXIV-2014, 15-20 iulie, Greifswald, Germania.
12. M. Jigau, GE Iacobescu, **M. Osiac**, Thin films of Ge₁Sb₂Te₄ prepared by pulsed laser deposition, Physics Conference TIM-14, 2014, Timisoara, Romania.
12. **M. Osiac**, V. Tiron, GE Iacobescu, The effect of Ge₁Sb₂Te₄ film doped with nitrogen, Physics Conference TIM-14, 2014, Timisoara, Romania.
13. **M. Osiac**, GE Iacobescu, V. Tiron, M. Jigau, Chalcogenide thin films deposited by high power impulse magnetron sputtering and pulsed laser deposition, 9th International Physics Conference of the Balkan Physical Union (BPU-9), 2015, Istanbul, Turcia.
14. **M. Osiac**, V. Tiron, G.E. Iacobescu, Phase change behaviour in nitrogen-doped Ge₁Sb₂Te₄, 32nd-International conference on phenomena in ionized gases (ICPIG), 26-23 July, 2015, Iasi, Romania.

15. **M. Osiac**, M. Jigau, G.E. Iacobescu, N. Cioatera, The Ge₁Sb₂Te₄ thin film prepared by pulsed laser deposition, 32nd-International conference on phenomena in ionized gases (ICPIG), 26-23 July, 2015, Iasi, Romania.
16. **M. Osiac**, V. Tiron, The Ge₁Sb₂Te₄ thin film prepared by pulsed laser deposition, 16th International Balkan Workshop on Applied Physics and Materials Science IBWAP 2016, 7-9 iulie Constanta.
17. **M. Osiac**, G.E. Iacobescu, M. Jigau, Effects of nitrogen and Ti dopants on the electrical properties of Ge₁Sb₂Te₄ films, 13th International Conference on Nanosciences & Nanotechnologies (NN16), 2016, Salonic, Greece.
18. M. Jigau, **M. Osiac**, G.E. Iacobescu, N. Cioatera, The Ti doped Ge₁Sb₂Te₄ thin films prepared by pulsed laser deposition, 11th International Conference On Physics Of Advanced Materials (ICPAM-11), 2016, Cluj.
19. **M. Osiac**, N. Cioatera, M. Jigau, Structural, Morphological, and Optical Properties of Iron Doped WO₃ Thin Film Prepared by Pulsed Laser Deposition, ICAAS 3th Conference on Applied Surface Science, 17-20 iunie, 2019, Pisa, Italia.

Articole publicate in reviste nationale cu referenti

1. C.P. Lungu, V. Ionescu, **M. Osiac**, C. Cotarlan, O. Pompilian, A.M. Lungu, V. Ciupina, Thermionic vacuum arc deposited Al-doped amorphous carbon nanocomposite coatings, Journal of Non-Oxide Glasses 1/2, 90-96, 2009.
2. V. Ionescu, C. P. Lungu, **M. Osiac**, C. Cotarlan, O.G. Pompilian, A. M. Lungu, V. Ciupina, Carbon-copper amorphous composite coatings grown by thermionic vacuum arc method, Ovidius University Annals of Chemistry, Volume 20, Number 2, pp.193-198, 2009.
3. A.E. Stamate, R. Zavoianu, O.D. Pavel, A. Cruceanu, M.C. Corobea, **M. Osiac**, N. Cioatera, LDH-GO composites as catalysts for the oxidative removal of indigo carmine dye from wastewater, Romanian Journal of Ecology and Environmental Chemistry, Vol.2, No.2, 2020.

CĂRȚI SI CAPITOLE ÎN CĂRȚI PUBLICATE

1. **M. Osiac**, Spectroscopic studies of microwave plasmas containing diborane and acetylene, Shaker, Germania, ISBN 3-8322-1548-4
2. E. Osiac, T.A. Balseanu, B. Catalin, **M. Osiac**, Tomografie optica coerenta-Aplicatii speciale in medicina, SITECH Craiova, 978-606-11-4061-9
3. **M. Osiac**, Fizica Plasmei, Universitaria, 129 pagini.
4. **M. Osiac**, M.T. Udristoiu, Optica Lucrari de laborator, Universitaria Craiova. 103 pagini.

PROIECTE CASTIGATE PRIN COMPETITIE

A. Contracte internationale

1. III-V Compunds (like AlN, InN, GaN) and Related Materials
NATO CBP.EAG.RIG. 982008,
Tipul proiectului: cercetare NATO
Perioada: 2006-2009
Calitatea: **Director de proiect**

B. Contracte Nationale

1. Depuneri ale compusilor III-V si materialele acestora
Nr. 1481/ 07.04.2006,
Tipul proiectului: CEEX modulul II
Perioada: 2006-2009

Calitatea: **Director de proiect**

2. Centru de cercetare fundamental si aplicativa in plasma de pulverizare magnetic pulsate de inalta putere,
Nr. 180CPI/03.09.2008

Perioada: 2009-2010

Tipul proiectului: **PNII-CAPACITATI, Modulul I** Perioada: 2008-2010

Calitatea: **Director de proiect**

3. Process and device for thin films deposition in highly ionized pulsed plasma,
Nr. 174/2012

Tipul proiectului: Parteneriate PCCA II

Perioada: 2013-2017

Calitatea: **Responsabil de proiect**

4. Tehnologii emergente pentru valorificarea industriala a structurilor 2D grafenice si nongrafenice,
Nr. 80 PCCDI/30.03.2018

Tipul proiectului: Consortii PCCDI

Perioada: 2018-2021

Calitatea: **Responsabil de proiect**

5. Fabricarea calibrarea si testarea de sisteme integrate avansate de senzori pentru aplicatii in Securitate sociala:
proiect P4-tehnologii pentru membrane active ale senzorilor pe baza de trioxid de wolfram dopat,

Nr. 15PCCDI/01.03.2018

Tipul proiectului: Consortii PCCDI

Perioada: 2018-2021

Calitatea: **Responsabil de proiect**

6. Noaptea Cercetatorilor, RNRscience escape from laboratory 609771

Perioada: 2013

Horizon 2020, Maria Sklodowska Curie Actions, Project funded by the European Commission

Calitatea: **Responsabil de proiect**

7. Noaptea Cercetatorilor, RNR RoTalkScience 633311

Perioada: 2014

Horizon 2020, Maria Sklodowska Curie Actions, Project funded by the European Commission

Calitatea: **Responsabil de proiect**

8. Noaptea Cercetatorilor, RNR RoTalkScience 633311

Perioada: 2015

Horizon 2020, Maria Sklodowska Curie Actions, Project funded by the European Commission

Calitatea: **Responsabil de proiect**

9. Proiect de mobilitate - LIBS cu aplicatii in medicina

Perioada: 2019, Universitatea din Kassel

Calitatea: **Director de proiect**

10. Tehnologii si materiale avansate pentru aplicatii in optoelectronica

Tipul contractului: PNII-CAPACITATI, Modulul I

Numarul contractului/anul: 126/2007

Beneficiar: MCT-ANCS

Calitatea: **Membru**

11. TEHNOPLAT OLTENIA. Platforma de cercetare-inovare interdisciplinara, formare si transfer de cunostinte

Tipul contractului: Platforma tehnologica

Numarul contractului/anul: 39C/2006

Codul CNCSIS: 107/2006

Beneficiar: CNCSIS-MEC

Calitatea: **membru**

12. Super resistant Metallic Covering at high temperature using Thermionic Vacuum Arc

Tipul contractului: CEEEX-PD

Numarul contractului/anul: 1535/07.04.2006

Project Director C.P. Lungu

Calitatea: **membru**

13. New high-voltage pulsed structures, generating cold atmospheric plasma jets, with bio-medical applications,

Tipul contractului **PN II IDEI**

Numarul contractului/anul: 19/28.09.2007

Project Director Nicolae Georgescu

Calitatea: **membru**