LISTĂ DE LUCRĂRI

a) Lista publicații relevante

Nr. Lucrări ISI (WOS)	*din care*	ISI cu factor de impact	Q1	Q2	**Total Q1+Q2**
44		**29**	**5**	**7**	**12**

1. *Microstructural and Morphological Characterization of the Cobalt-Nickel Thin Films Deposited by the Laser-Induced Thermionic Vacuum Arc Method*

Dinca Virginia, **Mandes Aurelia**, Vladoiu Rodica, Prodan Gabriel, Ciupina Victor, Polosan Silviu, COATINGS Volume13, Issue6, JUN 2023. IF=3,4; AIS=1,00 Category Quartile **Q2**

2. *Synthesis of Cobalt-Nickel Aluminate Spinels Using the Laser-Induced Thermionic Vacuum Arc Method and Thermal Annealing Processes*

Vladoiu Rodica, **Mandes Aurelia**, Dinca Virginia, Matei Elena, Polosan Silviu, NANOMATERIALS Volume12 Issue21, NOV 2022 IF=5,719; AIS=1,557 Category Quartile **Q1**

3. *The Synergistic Effect of the Laser Beam on the Thermionic Vacuum Arc Method for Titanium-Doped Chromium Thin Film Deposition*

Vladoiu Rodica, **Mandes Aurelia**, Dinca Virginia, Ciupina, Victor, Matei Elena, Polosan Silviu, COATINGS, (2022) Volume12, Issue4, Article Number 470, DOI10.3390/coatings12040470, IF 2.881, Category Quartile **Q2**

4. *Magnesium-silver cathodes for efficient charge injection into Organic Light Emitting Diodes deposited by LTVA method*

Vladoiu Rodica, **Mandes Aurelia**, Dinca Virginia, Kudrna Pavel, Tichy Milan, Polosan Silviu, JOURNAL OF ALLOYS AND COMPOUNDS, (2021) Volume 869, Article Number 159364, DOI10.1016/j.jallcom.2021.159364, IF 5.316, Category Quartile **Q1**

5. *Carbon-titanium nanostructures: synthesis and characterization*

Ciupina Victor, Lungu Cristian P.,Vladoiu Rodica, Porosnicu Corneliu, Vasile Eugeniu, Nicolescu Virginia, **Mandes Aurelia**, Dinca Virginia, Cupsa Ovidiu, PHYSICA SCRIPTA (2020) Volume 95, Issue4, Article Number044012
DOI10.1088/1402-4896/ab6d45, IF 2.487, Category Quartile **Q2**

6. *Characterization of Platinum-Based Thin Films Deposited by Thermionic Vacuum Arc (TVA) Method*

Cozma Sebastian, Vladoiu Rodica, **Mandes Aurelia**, Dinca Virginia, Prodan Gabriel, Bursikova Vilma, MATERIALS (2020) Volume 13, Issue7, Article Number1796, DOI10.3390/ma13071796, IF 3.623, Category Quartile **Q1**

7. *Thermionic Vacuum Arc-A Versatile Technology for Thin Film Deposition and Its Applications*

Vladoiu Rodica, Tichy Milan, **Mandes Aurelia**, Dinca Virginia, Kudrna Pavel, COATINGS (2020) Volume 10, Issue 3, Article Number211, DOI10.3390/coatings10030211, IF 2.436, Category Quartile **Q2**

8. *Synthesis and Characterization of Complex Nanostructured Thin Films Based on Titanium for Industrial Applications*

Vladoiu Rodica, **Mandes Aurelia**, Dinca Virginia, Balasoiu, Maria, Soloviov Dmytro, Turchenko, Vitalii, MATERIALS (2020) Volume 13, Issue2, Article Number399, DOI10.3390/ma13020399, IF 3.623, Category Quartile **Q1**

9. *Plasma diagnostics and characterization of the Mg and Mg-Zn thin films deposited by thermionic vacuum arc (TVA) method*

Vladoiu Rodica, **Mandes Aurelia**, Dinca Virginia, Prodan Gabriel, Kudrna Pavel, Tichy Milan, VACUUM (2019) Volume 167, Page129-135, DOI10.1016/j.vacuum.2019.06.002, IF 3.627, Category Quartile **Q2**

10. *The Properties of Binary and Ternary Ti Based Coatings Produced by Thermionic Vacuum Arc (TVA) Technology*

Mandes Aurelia, Vladoiu Rodica, Prodan Gabriel, Dinca Virginia, Porosnicu Corneliu, Dinca Paul, COATINGS (2018) Volume8, Issue3, Article Number114
DOI10.3390/coatings8030114, IF 2.881, Category Quartile **Q2**

11. *Correlation study of nanocrystalline carbon doped thin films prepared by a thermionic vacuum arc deposition technique*

Dinca Virginia, Vladoiu Rodica, **Mandes Aurelia**, Prodan Gabriel, JOURNAL OF PHYSICS D-APPLIED PHYSICS (2017) Volume50, Issue43, Article Number 435305, DOI10.1088/1361-6463/aa86dc, IF 3.207, Category Quartile **Q2**

12. *Magnesium plasma diagnostics by heated probe and characterization of the Mg thin films deposited by thermionic vacuum arc technology*

Vladoiu Rodica, **Mandes Aurelia,** Dinca Virginia, Prodan Gabriel, Kudrna Pavel, Tichy Milan,PLASMA SOURCES SCIENCE & TECHNOLOGY (2015) Volume 24, Issue 3, Article Number 035008, DOI10.1088/0963-0252/24/3/035008, IF 3.584,
Category Quartile **Q1**

b) TEZA DE DOCTORAT

Titlu: "Studiul comparativ al nanostructurilor de carbon depuse prin metoda Arcului Termoionic in Vid (TVA) si pulverizare magnetron"
Coordonator științific: Prof. Univ. Dr. Victor Ciupina
Instituția eliberatoare: Universitatea București, 2010

c) CAPITOLE DE CĂRŢI /CONTRIBUȚII LA VOLUME COLECTIVE

1. Rodica Vladoiu, Corneliu Porosnicu, **Aurelia Mandes,** Ionut Jepu, Virginia Dinca, Aurelian Marcu, Mihail Lungu, Gabriel Prodan and Liga Avotina – "DLC Thin Films and Carbon Nanocomposite Growth by Thermionic Vacuum Arc (TVA) Technology" **capitol in "Diamond and Carbon Composites and Nanocomposites" – Ed. INTECHChapter 5** (2016)12 pagini ISBN 978-953-51-2453-5
„Filme subțiri DLC și nanocomposite pe bază de carbon depuse prin Arcul Termoionic în Vid (TVA)"
https://www.intechopen.com/books/diamond-and-carbon-composites-and-nanocomposites/dlc-thin-films-and-carbon-nanocomposite-growth-by-thermionic-vacuum-arc-tva-technology

2. R. Vlădoiu, V. Ciupină, M. Conţulov, V. Dincă, **A. Mandeş,** M. Prodan Capitolul 6 *„DLC Thin Films Growth in Thermionic Vacuum Arc Technologies: TVA and GTVA*" **capitol** in **cartea "Diamond-Like Carbon Films", Ed NOVA Science Publishers** (2012) 9 pagini**,** ISBN: 978-1-61324-791-4
"Formarea de filme DLC prin tehnologiile Arcului Termoionic în Vid: TVA și GTVA"
https://www.novapublishers.com/catalog/product_info.php?products_id=35057

3. R. Vlădoiu, **A. Mandes,** V. Dincă, M. Conţulov, V. Ciupină, C. P. Lungu, G. Musa **"**Investigation of DLC and multilayer coatings hydrophobic character for biomedical applications**" Capitolul in "New Industrial Plasma Technology" – Ed. Wiley -VCH,** 7 pagini **(**2010) ISBN: 978-3-527-32544-3
"Investigarea caracterului hidrofob a straturilor DLC și multistrat pentru aplicații biomedicale"

http://onlinelibrary.wiley.com/doi/10.1002/9783527629749.ch29/summary

d) CURSURI UNIVERSITARE

1. R. Vladoiu, A. Mandes "Spectroscopie si laseri", Ovidius University Press, 127 pagini (2016), ISBN 978-973-614-900-9

e) Articole in reviste cotate ISI cu factor de impact

1. *Microstructural and Morphological Characterization of the Cobalt-Nickel Thin Films Deposited by the Laser-Induced Thermionic Vacuum Arc Method*
   Dinca Virginia, **Mandes Aurelia**, Vladoiu Rodica, Prodan Gabriel, Ciupina Victor, Polosan Silviu, COATINGS Volume13, Issue 6, 2023. IF=3,4; Category Quartile **Q2**
2. *Synthesis of Cobalt-Nickel Aluminate Spinels Using the Laser-Induced Thermionic Vacuum Arc Method and Thermal Annealing Processes*
   Vladoiu Rodica, **Mandes Aurelia**, Dinca Virginia, Matei Elena, Polosan Silviu, NANOMATERIALS Volume12 Issue 21, 2022 IF=5,719; Category Quartile **Q1**
3. *Electron Irradiation of Titanium-Doped Chromium Nanostructured Thin Films for Higher Conductive Electrodes*
   Polosan Silviu, Ciobotaru Claudiu Constantin, Ciobotaru Iulia Corina, Enculescu Monica, Iosub Doru, **Mandes Aurelia**, Vladoiu Rodica, IEEE TRANSACTIONS ON NANOTECHNOLOGY, Volume21 Page823-829, 2022 IF=2,967; AIS=0,996
4. *The Synergistic Effect of the Laser Beam on the Thermionic Vacuum Arc Method for Titanium-Doped Chromium Thin Film Deposition*
   Vladoiu Rodica, **Mandes Aurelia**, Dinca Virginia, Ciupina, Victor, Matei Elena, Polosan Silviu, COATINGS, (2022) Volume12, Issue4, Article Number 470, DOI10.3390/coatings12040470, IF 2.881, Category Quartile **Q2**
   https://www.mdpi.com/2079-6412/12/4/470
5. *Magnesium-silver cathodes for efficient charge injection into Organic Light Emitting Diodes deposited by LTVA method*
   Vladoiu Rodica, **Mandes Aurelia**, Dinca Virginia, Kudrna Pavel, Tichy Milan, Polosan Silviu, JOURNAL OF ALLOYS AND COMPOUNDS, (2021) Volume 869, Article Number 159364, DOI10.1016/j.jallcom.2021.159364, IF 5.316, Category Quartile **Q1**
   https://www.sciencedirect.com/science/article/abs/pii/S0925838821007726
6. *Carbon-titanium nanostructures: synthesis and characterization*

Ciupina Victor, Lungu Cristian P.,Vladoiu Rodica, Porosnicu Corneliu, Vasile Eugeniu, Nicolescu Virginia, **Mandes Aurelia**, Dinca Virginia, Cupsa Ovidiu, PHYSICA SCRIPTA (2020) Volume 95, Issue4, Article Number044012
DOI10.1088/1402-4896/ab6d45, IF 2.487, Category Quartile **Q2**
https://iopscience.iop.org/article/10.1088/1402-4896/ab6d45/meta

7. *Characterization of Platinum-Based Thin Films Deposited by Thermionic Vacuum Arc (TVA) Method*
   Cozma Sebastian, Vladoiu Rodica, **Mandes Aurelia**, Dinca Virginia, Prodan Gabriel, Bursikova Vilma, MATERIALS (2020) Volume 13, Issue7, Article Number1796, DOI10.3390/ma13071796, IF 3.623, Category Quartile **Q1**
   https://www.mdpi.com/1996-1944/13/7/1796
8. *Thermionic Vacuum Arc-A Versatile Technology for Thin Film Deposition and Its Applications*
   Vladoiu Rodica, Tichy Milan, **Mandes Aurelia**, Dinca Virginia, Kudrna Pavel, COATINGS (2020) Volume 10, Issue 3, Article Number211, DOI10.3390/coatings10030211, IF 2.436, Category Quartile **Q2**
   https://www.mdpi.com/2079-6412/10/3/211
9. *Synthesis and Characterization of Complex Nanostructured Thin Films Based on Titanium for Industrial Applications*
   Vladoiu Rodica, **Mandes Aurelia**, Dinca Virginia, Balasoiu, Maria, Soloviov Dmytro, Turchenko, Vitalii, MATERIALS (2020) Volume 13, Issue2, Article Number399, DOI10.3390/ma13020399, IF 3.623, Category Quartile **Q1**
   https://www.mdpi.com/1996-1944/13/2/399
10. *Plasma diagnostics and characterization of the Mg and Mg-Zn thin films deposited by thermionic vacuum arc (TVA) method*
    Vladoiu Rodica, **Mandes Aurelia**, Dinca Virginia, Prodan Gabriel, Kudrna Pavel, Tichy Milan, VACUUM (2019) Volume 167, Page129-135, DOI10.1016/j.vacuum.2019.06.002, IF 3.627, Category Quartile **Q2**
    https://www.sciencedirect.com/science/article/abs/pii/S0042207X19308280
11. *The Properties of Binary and Ternary Ti Based Coatings Produced by Thermionic Vacuum Arc (TVA) Technology*
    Mandes Aurelia, Vladoiu Rodica, Prodan Gabriel, Dinca Virginia, Porosnicu Corneliu, Dinca Paul, COATINGS (2018) Volume8, Issue3, Article Number114

DOI10.3390/coatings8030114, IF 2.881, Category Quartile **Q2**
https://www.mdpi.com/2079-6412/8/3/114

12. *Structural and Mechanical Properties of Nanostructured C-Ag Thin Films Synthesized by Thermionic Vacuum Arc Method*
Vladoiu Rodica, , **Mandes Aurelia**, Dinca-Balan Virginia, Vilma Bursikova, JOURNAL OF NANOMATERIALS (2018) Volume2018, Article Number 9632041, DOI10.1155/2018/9632041, IF 2.986
https://www.hindawi.com/journals/jnm/2018/9632041/

13. *Correlation study of nanocrystalline carbon doped thin films prepared by a thermionic vacuum arc deposition technique*
Dinca Virginia, Vladoiu Rodica, **Mandes Aurelia**, Prodan Gabriel, JOURNAL OF PHYSICS D-APPLIED PHYSICS (2017) Volume50, Issue43, Article Number 435305, DOI10.1088/1361-6463/aa86dc, IF 3.207, Category Quartile **Q2**
https://iopscience.iop.org/article/10.1088/1361-6463/aa86dc/meta

14. *Synthesis of reinforced magnesium embedded in carbon matrix by using Thermionic Vacuum Arc (TVA) technology*
Vladoiu Rodica, **Mandes Aurelia**, Dinca Virginia Prodan Gabriel, Ciupina Victor, ROMANIAN REPORTS IN PHYSICS (2016), Volume 68, Issue 3, Page1076-1084, IF 1.785
http://www.rrp.infim.ro/2016_68_3/A14.pdf

15. *Characterization of spin-coated TiO2 buffer layers for dye-sensitized solar cells*
Lungu J, Stefan N, Prodan Gabriel, Gergescu Adrian, **Mandes Aurelia**, Ciupina Victor, et.al., DIGEST JOURNAL OF NANOMATERIALS AND BIOSTRUCTURES (2015) Volume 10, Issue 3, Page 967-976, IF 0.963
www.chalcogen.ro/967_Lungu.pdf

16. *Magnesium plasma diagnostics by heated probe and characterization of the Mg thin films deposited by thermionic vacuum arc technology*
Vladoiu Rodica, **Mandes Aurelia,** Dinca Virginia, Prodan Gabriel, Kudrna Pavel, Tichy Milan,PLASMA SOURCES SCIENCE & TECHNOLOGY (2015) Volume 24, Issue 3, Article Number 035008, DOI10.1088/0963-0252/24/3/035008, IF 3.584, Category Quartile **Q1**
http://iopscience.iop.org/0963-0252/24/3/035008/article

17. *Binary C-Ag plasma breakdown and structural characterization of the deposited thin films by Thermionic Vacuum Arc method*

    Mandes Aurelia, Vladoiu Rodica, Dinca Virginia, Prodan Gabriel, IEEE TRANSACTIONS ON PLASMA SCIENCE (2014), Volume 42, Issue 10, Page2806-2807, DOI10.1109/TPS.2014.2323086, IF 1.222

    http://ieeexplore.ieee.org/xpl/tocresult.jsp?isnumber=6932538&filter%3DAND%28p_IS_Number%3A6932538%29%26pageNumber%3D6&pageNumber=10

18. *Application of carbon-tungsten, carbon-beryllium and carbon-aluminium nanostructures in divertors coatings from fusion reactor*

    Ciupina Victor, Morjan I, Vladoiu Rodica, Lungu Cristian P., Porosnicu Corneliu, Jepu Ionut, Prodan Gabriel, Stanescu Iuliana, **Mandes Aurelia**, Contulov Mirela, Dinca Virginia, et. al., JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS (2013), Volume 15, Issue 11-12, Page 1450-1456, IF 0.587

    http://joam.inoe.ro/index.php

19. *Investigation of the SiC thin films synthetized by Thermionic Vacuum Arc method (TVA)*

    Ciupina Victor, Vladoiu Rodica, Lungu Cristian P., Dinca Virginia, Contulov Mirela, **Mandes Aurelia**, Popov Petrica, Prodan Gabriel, EUROPEAN PHYSICAL JOURNAL D (2012), Volume 66, Issue 4, Article Number 99, DOI10.1140/epjd/e2012-20470-5, IF 1.425

    http://epjd.epj.org/component/issues/

20. *Synthesis and characterization of nanostructured a-C:H (Hydrogenated Amorphous Carbon) thin films by Gaseous Thermionic Vacuum Arc (G-TVA) deposition technique*

    Vladoiu Rodica, Ciupina Victor, Contulov Mirela, Dinca Virginia,**Mandes Aurelia**, Bursikova Vilma, PLASMA CHEMISTRY AND PLASMA PROCESSING (2012) Volume 32, Issue 2, Page 219-229 DOI10.1007/s11090-011-9344-x, IF 3.148

    http://link.springer.com/journal/volumesAndIssues/11090

21. *HRTEM Images of a-C:H Thin Films Deposited by G-TVA Technique*

    Vladoiu Rodica, Ciupina Victor, **Mandes Aurelia**, Contulov Mirela, Dinca Virginia, Prodan Madalina, IEEE TRANSACTIONS ON PLASMA SCIENCE (2011) Volume 39, Issue 11, Page 2802-2803, DOI10.1109/TPS.2011.2160973, IF 1.222

    http://ieeexplore.ieee.org/xpl/tocresult.jsp?isnumber=6070430&punumber=27

22. *Synthesis and Characterization of Some Carbon Based Nano-structures*

Ciupina Victor, Sullivan J, Saied S., Vladoiu Rodica, Prodan Gabriel, Stanescu Iuliana, **Mandes Aurelia**, Contulov Mirela, Dinca Virginia, et. al., CONTRIBUTIONS TO PLASMA PHYSICS (2011) Volume 51, Issue 6, Page 546-553, DOI10.1002/ctpp.201010157, IF 1.563

http://onlinelibrary.wiley.com/doi/10.1002/ctpp.v51.6/issuetoc

23. *Tribological properties of carbon-tungsten nanocomposites synthetized by Thermionic Vacuum Arc (TVA) method*

Vladoiu Rodica, Ciupina Victor, **Mandes Aurelia**, Contulov Mirela, Dinca Virginia, Popov Petrica, Lungu Cristian P., ROMANIAN REPORTS IN PHYSICS (2011) Volume 63, Issue 4, Page1053-1060, IF 1.785

http://rrp.infim.ro/

24. *Growth and characteristics of tantalum oxide thin films deposited using Thermionic Vacuum Arc technology*

Vladoiu Rodica, Ciupina Victor, **Mandes Aurelia**, Dinca Virginia, Prodan Madalina, Musa Geavit, JOURNAL OF APPLIED PHYSICS (2010) Volume 108, Issue 9, Article Number 093301, DOI10.1063/1.3503278, IF 1.425

http://scitation.aip.org/content/aip/journal/jap

25. *Structure and tribological properties of carbon based nanocomposites grown by TVA method*

Vladoiu Rodica, Ciupina Victor, Contulov Mirela, **Mandes Aurelia**, Contulov Mirela, Dinca Virginia, Prodan Gabriel, Lungu Cristian P., JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS (2010) Volume 12, Issue 3, Page 553-556, IF 0.587

http://joam.inoe.ro/index.php

26. *The double M-effect induced by noble gases activated with negative ions*

Vladoiu Rodica, Contulov Mirela, **Mandes Aurelia**, Musa Geavit, EUROPEAN PHYSICAL JOURNAL D (2009) Volume 54, Issue 2, Page287-291, DOI10.1140/epjd/e2008-00257-1, IF 1.425

https://link.springer.com/article/10.1140/epjd/e2008-00257-1

27. *TEM investigation of the C-Me multilayer nanocomposites deposited by Thermionic Vacuum Arc (TVA) method*

Ciupina Victor, Vladoiu Rodica, **Mandes Aurelia**, Musa Geavit, Lungu P. Cristian JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS (2008) Volume 10, Issue 11, Page 2958-2962, IF 0.587
http://joam.inoe.ro/download.php?idu=1730

28. *The M-effect, a synergetic result of three body collisions and metastable/resonance radiation trapping*
Musa Geavit, Vladoiu Rodica, Surdu-Bob C, **Mandes Aurelia**, OPTOELECTRONICS AND ADVANCED MATERIALS-RAPID COMMUNICATIONS (2008), Volume 2, Issue 3, Page 176-177, IF 0.587
https://oam-rc.inoe.ro/index.php?option=magazine&op=view&idu=467&catid=24

29. *Preliminary results on comparative study of three methods for nanocarbon films deposition: thermionic vacuum arc, magnetron sputtering and cathodic arc*
Vladoiu Rodica, Ciupina Victor, **Mandes Aurelia**, Dinca Virginia, Contulov Mirela, Prodan Madalina, Musa Geavit, JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS (2008), Volume 10, Issue 3, Page 723-726, IF 0.587
http://joam.inoe.ro/index.php

30. *Characterization of nanostructured carbon-metal bilayers deposited by Thermionic Vacuum Arc (TVA) technology*
Vladoiu Rodica, Ciupina Victor, Lungu P Cristian, Pompilian Oana, Chiru P., Prodan Gabriel, **Mandes Aurelia**, Musa Geavit, CHEMICKE LISTY (2008) Volume 102, Page S1482-S1485, Supplement4, Special IssueSI, IF 0.381
http://www.chemicke-listy.cz/docs/full/2008_s4_s1482-s1485.pdf

f) Articole in reviste cotate ISI fara factor de impact

31. *Carbon-Titanium based multilayer nanostructures obtained by TVA method*
Ciupina Victor, Lungu Cristian P.,Vladoiu Rodica, Prodan Gabriel, Porosnicu Corneliu, Vasile Eugeniu, Prodan Madalina, Nicolescu Virginia, **Mandes Aurelia**, Dinca Virginia, et.al
NANOENGINEERING: FABRICATION, PROPERTIES, OPTICS, THIN FILMS, AND DEVICES XVI (2019) Book SeriesProceedings of SPIE, Volume11089, Article NumberUNSP 110890N, DOI10.1117/12.2528663

https://www.spiedigitallibrary.org/conference-proceedings-of-spie/11089/110890N/Carbon-titanium-based-multilayer-nanostructures-obtained-by-TVA-method/10.1117/12.2528663.short

32. *Titanium - Carbon Multilayer Nanostructures Obtained by Thermionic Vacuum Arc Method*

Ciupina Victor, Lungu Cristian P., Vasile Eugeniu, Prodan Gabriel, Porosnicu Corneliu, Vladoiu Rodica, **Mandes Aurelia**, Dinca Virginia, Nicolescu Virginia, Prodan Madalina, Manu Radu, TURKISH PHYSICAL SOCIETY 35TH INTERNATIONAL PHYSICS CONGRESS (TPS35) Book SeriesAIP Conference Proceedings (2019), Volume2178, Article Number030035, DOI10.1063/1.5135433
https://aip.scitation.org/doi/abs/10.1063/1.5135433

33. *Nanostructured Carbon-Titanium multilayer films obtained by Thermionic Vacuum Arc method*

Ciupina Victor, Lungu Cristian P.,Vladoiu Rodica, Prodan Gabriel, Porosnicu Corneliu, Vasile Eugeniu, Prodan Madalina, Nicolescu Virginia, **Mandes Aurelia**, Dinca Virginia, NANOSTRUCTURED THIN FILMS XI, Book SeriesProceedings of SPIE (2018), Volume10731, Article Number1073107,
DOI10.1117/12.2320474
https://www.spiedigitallibrary.org/conference-proceedings-of-spie/10731/1073107/Nanostructured-carbon-titanium-multilayer-films-obtained-by-thermionic-vacuum-arc/10.1117/12.2320474.

34. *Nitrogen Doped Silicon-Carbon Multilayer Protective Coatings on Carbon Obtained By Thermionic Vacuum Arc (TVA) Method*

Ciupina Victor Vasile Eugeniu, Porosnicu Corneliu, Vladoiu Rodica, **Mandes Aurelia**, Dinca Virginia, et.al.TURKISH PHYSICAL SOCIETY 33RD INTERNATIONAL PHYSICS CONGRESS (TPS33) Book SeriesAIP Conference Proceedings (2017), Volume1935, Article Number050001, DOI10.1063/1.5025973
https://aip.scitation.org/doi/abs/10.1063/1.5025973

35. *Carbon-Titanium Multilayer Films: Synthezis and Characterization*

Ciupina Victor, Lungu Cristian P., Vasile Eugeniu, Prodan Gabriel, Porosnicu Corneliu, Vladoiu Rodica, **Mandes Aurelia**, Dinca Virginia, et.al. TURKISH PHYSICAL SOCIETY 34TH INTERNATIONAL PHYSICS CONGRESS (TPS34) Book

SeriesAIP Conference Proceedings (2018), Volume2042, Article Number020034, DOI10.1063/1.5078906
https://aip.scitation.org/doi/abs/10.1063/1.5078906

36. *Titanium-based thin films for protective coatings prepared by TVA (Thermionic Vacuum Arc) technology*
Vladoiu Rodica, **Mandes Aurelia**, Dinca Virginia, Prodan Gabriel, 2018 5TH INTERNATIONAL CONFERENCE ON MECHANICAL, MATERIALS AND MANUFACTURING (ICMMM 2018), Book SeriesMATEC Web of Conferences (2018), Volume249, Article Number01005, DOI10.1051/matecconf/201824901005
https://www.matec-conferences.org/articles/matecconf/abs/2018/108/matecconf_icmmm2018_01005/matecconf_icmmm2018_01005.html

37. *Nitrogen doped Silicon-Carbon multilayer protective coatings on Carbon obtained by TVA method*
Ciupina Victor, Vasile Eugeniu, Porosnicu Corneliu, Lungu Cristian P.,Vladoiu Rodica, Jepu Ionut, **Mandes Aurelia**, Dinca Virginia, et.al., NANOSTRUCTURED THIN FILMS X, Book SeriesProceedings of SPIE (2017), Volume 10356, Article Number UNSP 103560O, DOI10.1117/12.2272579
https://www.spiedigitallibrary.org/conference-proceedings-of-spie/10356/103560O/Nitrogen-doped-silicon-carbon-multilayer-protective-coatings-on-carbon-obtained/10.1117/12.2272579.short?SSO=1

38. *Characterization of nitrogen doped silicon-carbon multi-layer nanostructures obtained by TVA method*
Ciupina Victor, Vasile Eugeniu, Porosnicu Corneliu, Prodan Gabriel, Lungu Cristian P.,Vladoiu Rodica, Jepu Ionut, **Mandes Aurelia**, Dinca Virginia, et.al., NANOSTRUCTURED THIN FILMS IX, Book SeriesProceedings of SPIE (2016) Volume 9929, DOI10.1117/12.2237156
http://proceedings.spiedigitallibrary.org/proceeding.aspx?articleid=2562226

39. *Structural and electrical properties of N doped SiC nanostructures obtained by TVA method*
Ciupina Victor, Lungu Cristian P., Vladoiu Rodica, Prodan Gabriel, Antohe Stefan, Vasile Eugeniu, Porosnicu Corneliu, Jepu Ionut, **Mandes Aurelia**, Dinca Virginia, et.al.,

NANOSTRUCTURED THIN FILMS VIII, Book SeriesProceedings of SPIE (2015), Volume 9558, Article Number 955808, DOI10.1117/12.2187362.
http://proceedings.spiedigitallibrary.org/proceeding.aspx?articleid=2430739

40. *The effect of the substrate temperature and the acceleration potential drop on the structural and physical properties of SiC thin films deposed by TVA method*
Ciupina Victor, Lungu Cristian P., Vladoiu Rodica, Prodan Gabriel, Antohe Stefan, Porosnicu Corneliu, Jepu Ionut, **Mandes Aurelia**, et. al.,NANOSTRUCTURED THIN FILMS VII Book SeriesProceedings of SPIE (2014) Volume 9172, Article Number 91720Y, DOI10.1117/12.2061186
http://spie.org/Publications/Proceedings/Volume/9172

41. *SiC multi-layer protective coating on carbon obtained by thermionic vacuum arc method*
Ciupina Victor, Lungu Cristian P., Vladoiu Rodica, Epure T D, Prodan Gabriel, Rosca C, Porosnicu Corneliu, Jepu Ionut, Belc Marius, **Mandes Aurelia**, et. al., NANOSTRUCTURED THIN FILMS VI Book SeriesProceedings of SPIE (2013) Volume 8818, Article Number 881807, DOI10.1117/12.2024018
http://spie.org/Publications/Proceedings/Volume/8818

42. *Application of carbon-aluminum nanostructures in divertors coatings from fusion reactor*
Ciupina Victor, Lungu Cristian P., Vladoiu Rodica, Epure TD, Prodan Gabriel, Porosnicu Corneliu, **Mandes Aurelia**,et. al., NANOSTRUCTURED THIN FILMS V Book SeriesProceedings of SPIE (2012) Volume 8465, Article Number 846508 DOI10.1117/12.930443
http://spie.org/Publications/Proceedings/Volume/8465

43. *Electron mycroscopy characterization of some carbon based nanostructures with application in divertors coatings from fusion reactor*
Ciupina Victor, Morjan I, Lungu Cristian P., Vladoiu Rodica, Prodan Gabriel, Prodan Madalina, Zarovschi Valeriu, Porosnicu Corneliu, JStanescu Iuliana, **Mandes Aurelia**, Contulov Mirela, Dinca Virginia, et. al., NANOSTRUCTURED THIN FILMS IV Book SeriesProceedings of SPIE (2011) Volume 8104, Article Number 810411, DOI10.1117/12.892198
http://spie.org/Publications/Proceedings/Volume/8104

44. *Synthesis and characterization of some carbon based nanostructures*

Ciupina Victor, Morjan I, Alexandrescu R, Lungu P Cristian, Zarovschi Valeriu, Sullivan J., Saied S, **Mandes Aurelia**, Dinca Virginia, et.al.,
NANOENGINEERING: FABRICATION, PROPERTIES, OPTICS, AND DEVICES VII Book SeriesProceedings of SPIE (2010) Volume 7764, Article Number 77640O, DOI10.1117/12.859456
http://proceedings.spiedigitallibrary.org/volume.aspx?volumeid=645

g) Lucrări publicate în reviste şi volume de conferinţe cu referenţi (BDI)

1. *„Characterization of Nanostructured TiC Thin Films Synthesized by TVA (Thermionic Vacuum Arc) Method”*, V. Ciupina, R. Vladoiu, P. Popov, V. Dinca, M. Contulov, **A. Mandes,** C. P. Lungu, Journal of Materials Science Engineering A Vol. 2, No. 1, Jan. 2012, p 16-21A: 2161-6213, Database of EBSCO, Massachusetts, USA,
2. *“Surface Engineering of the Hydrogenated DLC (a-C:H) Coatings with Optimized Mechanical Performance”*, M. Contulov, R. Vladoiu, **A. Mandes,** V. Ciupina, V. Bursikova, Advanced Materials ResearchVols. 816-817 (2013) pp 33-37
3. *“Growth and Characterization of the High Purity C-Mg Thin Films Obtained by Thermionic Vacuum Arc (TVA) Technology”, **A. Mandes***, R.Vladoiu, V. Dinca, G. Prodan, Advanced Materials ResearchVols. 816-817 (2013) pp 106-110 ISBN-13:978-3-03785-867-7
4. *“Investigation of Composition-Properties’ Relations on Silicon and Carbon Based Nanomaterials”,* R. Vladoiu, **A. Mandes,** M. Contulov, V. Dinca, C. Porosnicu, Advanced Materials ResearchVols. 816-817 (2013) pp 232-236 ISBN-13:978-3-03785-867
5. “*Mechanical characterization of hydrogenated DLC (a-C:H) films synthesized using Magnetically Gaseous Thermionic Vacuum Arc (MGTVA) Technology*”, M. Contulov, R. Vladoiu, V. Dinca, V. Bursikova, **A. Mandes**, NanotechItaly2012 Promoting responsible innovation, pp 278-279
6. “*Comparison view of carbon and tantalum pentoxide thin films characteristics deposited by Thermionic Vacuum Arc (TVA) technology at nanometric scale*”, **A. Mandes,** R. Vladoiu, M. Contulov - NanotechItaly2012 Promoting responsible innovation, pp 244-245

7. "*Thermionic Vacuum Arc Nanotechnology Used for SiC Thin Films Deposition*", V. Dinca, R. Vladoiu, **A. Mandes** , NanotechItaly2012 Promoting responsible innovation, pp 258-259

ALTE LUCRĂRI ȘI CONTRIBUȚII

Lucrări susţinute oral la conferinţe naţionale/internaţionale:

1. „Synthesis of C-Mg thin films prepared by Thermionic Vacuum Arc (TVA) deposition method on different substrates" **A. Mandes**, R. Vladoiu, V. Dinca, 1st IMEPS Conference Antalya – Belek, Turkey (2014)

2. "Growth and Characterization of the High Purity C-Mg Thin Films Obtained by Thermionic Vacuum Arc (TVA) Technology", **A. Mandes**, R.Vladoiu, V. Dinca, G. Prodan, ICMST2013, Dubai, Emiratele Arabe Unite (2013)

3. "Properties of SiC and TiC nanostructured thin films growth by Thermionic Vacuum", R. Vladoiu, V. Ciupina, V. Dinca, M. Contulov, **A. Mandes**, G. Prodan, C. P. Lungu, Balkan Physical Union (BPU 2012), Constanta, Romania (2012)

Lucrări invitate prezentate la conferinţe internaţionale:

1. „Multiple body collisional resonance radiation of negative-positive gas mixtures", G. Musa, M. Contulov, **A. Mandes**, R. Vladoiu - IBWAP 2008, Constanta, Romania, July 7-9 2008

2. „Carbon based nanostructures: synthesis and characterization" - V. Ciupina, I.Morjan, R. Alexandrescu, F. Dumitrache, G. Prodan, C.P. Lungu, R.Vladoiu, I. Mustata, V. Zarovschi, J. Sullivan, S. Saied, E. Vasile, I. M. Oancea-Stanescu, M. Prodan, D. Manole, **A. Mandes**, V. Dinca, M. Contulov - IBWAP, Constanta, Romania, 6-8 July 2009

3. „Substrate's influence on the interface properties of the nanocarbon films deposited by Thermionic Vacuum Arc (TVA) method" – R. Vladoiu, V. Ciupina, M. Contulov, V. Dinca, **A. Mandes**, G. Musa - IBWAP, Constanta, Romania, 6-8 July 2009

4. „Investigation of the carbon based nanocomposites obtained by two guns configuration of Thermionic Vacuum Arc (TVA) method" - R. Vladoiu, V. Ciupina, M. Contulov, V. Dinca, **A. Mandes**, C.P. Lungu - Romanian Conference on Advanced Materials: ROCAM 2009, Brasov, Romania, 25-28 August 2009

5. "Properties of the nanostructured carbon thin films deposited by G-TVA method in methane plasma", R. Vladoiu, V. Ciupina, M. Contulov, **A. Mandes**, V. Dinca, M. Prodan, IBWAP 2010, Constanta, Romania, July 7-9, (2010)

6. „Applications of the nanometer-scaled carbon based thin films deposited by TVA technology", R. Vladoiu, V. Ciupina, V. Dinca, M. Contulov, **A. Mandes**, C.P. Lungu, SAPP XVIII, Vratna Dolina, Slovacia (2011)

7. „Nanometer-scaled thin films obtained by TVA tehnology in different configurations for specific applications" – R. Vladoiu, V. Ciupina, M. Contulov, V. Dinca, **A. Mandes**, C. P. Lungu, P. Popov, IBWAP 2011, Constanta, Romania, July 6-8, (2011)

8. „Carbon nanostructures and applications", V. Ciupina, I. Morjan, R. Vladoiu, E. Mamut, G. Prodan, I.M. Oancea-Stanescu, C. Porosnicu, **A. Mandes**, M. Contulov, V. Dinca, IBWAP 2011, Constanta, Romania, July 6-8, (2011)

9. "Carbon containing nanostructured thin films obtained by TVA technology in different configurations for specific applications", R. Vladoiu, V. Ciupina, M. Contulov, V. Dinca, **A. Mandes**, C. P. Lungu, EMRS 2012, Strasburg, Franta (2012)

10. "Nanostructured Thin Films Synthetized by Thermionic Vacuum Arc (TVA) Plasma Tehnology in Different Configurations for Specific Applications", R. Vladoiu, V Ciupina**, A. Mandes**, M. Contulov, V. Dinca, 2nd Annual World Congress of Nano-S&T (Nano-S&T2012), Qingdao, China (2012)

11. "Application of carbon-aluminum nanostructures in divertor coatings from fusion reactor", V. Ciupina, C.P. Lungu, R. Vladoiu, D. T. Epure, G. Prodan, C. Porosnicu, M. Prodan, I. M. Stanescu, M. Contulov, **A. Mandes**, V. Dinca, V. Zarovschi, SPIE - Nanostructured Thin Films VI, San Diego, California, USA (2012)

12. „SiC Multi-layer protective coating on carbon: synthesis and characterization", V. Ciupuna, C. P. Lungu, R. Vladoiu, I. D. Epure, G. Prodan, C. Porosnicu, I. Jepu, M. Belc, M. Prodan, I. M. Stanescu, C. Stefanov, M. Contulov, **A. Mandes**, V. Dinca, E. Vasile, V. Zarovschi, V. Nicolescu, IBWAP 2013, Constanta, Romania (2013)

13. „Composition-Properties Relations in Multi-component Carbon –Based Nanomaterials", R. Vladoiu, M. Contulov, **A. Mandes**, V. Dinca, V. Ciupina, C. Porosnicu, C. P. Lungu, IBWAP 2013, Constanta, Romania (2013)

14. "Surface Engineering of the Hydrogenated DLC (a-C:H) Coatings with Optimized Mechanical Performance", M. Contulov, R. Vladoiu, **A. Mandes**, V. Ciupina, V. Bursikova, ICMST2013, Dubai, Emiratele Arabe Unite (2013)

15. "Investigation of Composition-Properties' Relations on Silicon and Carbon Based Nanomaterials", R. Vladoiu, **A. Mandes**, M. Contulov, V. Dinca, C. Porosnicu, ICMST2013, Dubai, Emiratele Arabe Unite (2013)

16. "SiC multi-layer protective coating on carbon obtained by Thermionic Vacuum Arc method", V. Ciupina, C. P. Lungu, R. Vladoiu, D. T. Epure, G. Prodan, C. Porosnicu, I. Jepu, M. Belc, M. Prodan, C. Rosca, I. M. Stanescu, C. Stefanov, M. Contulov, **A. Mandes**, V. Dinca, E. Vasile, V. Zaroschi, V. Nicolescu, SPIE - Nanostructured Thin Films VI, San Diego, California, USA (2013)

17. „Plasma Treatment of Polyester Surface byDCSDBD for Biomedical Applications" Virginia Dinca, Rodica Vladoiu, **A. Mandes**, 1st IMEPS Conference Antalya – Belek, Turkey (2014)

18. „The effect of the substrate temperature and the acceleration potential drop on the structural and physical properties of SiC thin films deposed by TVA method", V. Ciupină, G. Prodan, R. Vlădoiu, C.P. Poroşnicu, E.Vasile, C.P. Lungu, M. Belc, I.M. Stanescu, V. Dinca, **A. Mandes**, V. Nicolescu, IBWAP 2014, Constanta, Romania (2014)

19. „Complex study of binary nanocomposites deposited by Thermionic Vacuum Arc (TVA) technology", R. Vladoiu, **A. Mandes**, V. Dinca, IBWAP 2014, Constanta, Romania (2014)

20. „The effect of the substrate temperature and the acceleration potential drop on the structural and physical properties of SiC thin films deposed by TVA method", V. Ciupină, C.P. Lungu, R. Vlădoiu, G. Prodan, S. Antohe, C.P. Poroşnicu, I.M. Stanescu, I. Jepu, S. Iftimie, M. Prodan, **A. Mandes**, V. Dinca, E.Vasile, V. Zarovski, V. Nicolescu, SPIE - Nanostructured Thin Films VI, San Diego, California, USA (2014)

21. "Structural and electrical properties of N doped SiC nanostructures obtained by TVA methode", V. Ciupina, C.P. Lungu, R. Vladoiu, G. 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, SPIE - Nanostructured Thin Films VI, San Diego, California, USA (2015)

22. „Investigation on the properties of some n doped SiC nanostructured thin films", Victor Ciupina, Cristian P. Lungu, Rodica Vladoiu, Gabriel C. Prodan, Stefan Antohe, Corneliu Porosnicu, Iuliana Stanescu, Ionut Jepu, Sorina Iftimie, Marius Belc, **Aurelia Mandes**, Virginia Dinca, Eugeniu Vasile, Valeriu Zarovski, Virginia Nicolescu, IBWAP 2015, Constanta, Romania (2015)

23. „Composites of carbon and titanium based nanostructures deposited by TVA method for industrial applications", R. Vladoiu, **A. Mandes**, V. Dinca, G. Prodan, IBWAP 2015, Constanta, Romania (2015)

24. „Structural and electrical properties of some 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, 9th International Physics Conference of the Balkan Physical Union – BPU9 , 24-27 August 2015 , Istanbul University , Istanbul , Turkey

25. „Characterization of nitrogen doped silicon-carbon multi-layer nanostructures obtained by TVA method", Victor Ciupina, Eugeniu Vasile, Corneliu Porosnicu, Gabriel Prodan, Cristian P Lungu,Rodica Vladoiu, Ionut Jepu, **Aurelia Mandes**, Virginia Dinca, Aureliana Caraiane, Virginia Nicolescu, Paul Dinca, Agripina Zaharia, SPIE - 28 August - 1 September 2016, SPIE Optics + Photonics 2016 San Diego, California, USA

26. „Nanocomposite titanium based thin films for protectiv coatings in industrial applications", Rodica VLADOIU, **Aurelia MANDES**, Virginia DINCA BALAN, Gabriel PRODAN, Corneliu POROSNICU, Cristian P. LUNGU - IBWAP 2016, Constanta, Romania, July 7-9 2016

27. „Characterization of nitrogen doped silicon carbide multi-layer nanostructures obtained BY TVA method", Victor Ciupina, Cristian P. Lungu, Rodica Vladoiu, Gabriel C. Prodan, Corneliu Porosnicu, Ionut Jepu, **Aurelia Mandes**, Virginia Dinca, Eugeniu Vasile, Aureliana Caraiane, Virginia Nicolescu, Agripina Zaharia - - IBWAP 2016, Constanta, Romania, July 7-9 2016

28. „Nitrogen doped Silicon-Carbon multilayer protective coatings on Carbon obtained by TVA method" - Ciupina Victor, Vasile Eugeniu, Porosnicu Corneliu, Lungu Cristian P.,Vladoiu Rodica, Jepu Ionut, **Mandes Aurelia**, Dinca Virginia, et.al., SPIE Optics + Photonics 2018, San Diego, California, 2017

29. "Studies on the binary films based on titanium by Thermionic Vacuum Arc (TVA) method "- R. Vladoiu, **A. Mandes**, V. Dinca-Balan, The 17th International Balkan Workshop on Applied Physics – Constanta, Romania, 2017

30. "Nitrogen doped silicon-carbon multilayer protective coatings on carbon" - Victor CIUPINA, Eugeniu Vasile, Corneliu Porosnicu, Gabriel C. Prodan, Cristian P. Lungu, Rodica Vladoiu, Ionut Jepu, **Aurelia Mandes**, Virginia Dinca-Balan The 17th International Balkan Workshop on Applied Physics – Constanta, Romania, 2017

31. „Nitrogen Doped Silicon-Carbon Multilayer Protective Coatings on Carbon Obtained By Thermionic Vacuum Arc (TVA) Method*"* - Ciupina Victor Vasile Eugeniu, Porosnicu Corneliu, Vladoiu Rodica, **Mandes Aurelia**, Dinca Virginia, et.al.TURKISH PHYSICAL SOCIETY 33RD INTERNATIONAL PHYSICS CONGRESS (TPS33) Bodrum, Turkey, 2017

32. „Titanium-based thin films for protective coatings prepared by TVA (Thermionic Vacuum Arc) technology" - Vladoiu Rodica, **Mandes Aurelia**, Dinca Virginia, Prodan Gabriel, 5TH INTERNATIONAL CONFERENCE ON MECHANICAL, MATERIALS AND MANUFACTURING (ICMMM 2018), Orlando, USA, 2018

33. „Nanostructured Carbon-Titanium multilayer films obtained by Thermionic Vacuum Arc method" - Ciupina Victor, Lungu Cristian P.,Vladoiu Rodica, Prodan Gabriel, Porosnicu Corneliu, Vasile Eugeniu, Prodan Madalina, Nicolescu Virginia, **Mandes Aurelia**, Dinca Virginia, SPIE Optics + Photonics 2018, San Diego, California, 2018

34. "Synthesis and characterization of the thin films based on titanium by Laser Thermionic Vacuum Arc (LTVA) method" - R. Vladoiu, **A. Mandes**, V. Dinca-Balan, G. Prodan - The 18th International Balkan Workshop on Applied Physics – Constanta, Romania, 2018

35. "Synergies between thermionic vacuum arc system and laser processes in the LTVA method for the synthesis of the Ti-based nanostructures*"* - Rodica VLADOIU, Virginia DINCA, **Aurelia MANDES**, Gabriel PRODAN, The 19th International Balkan Workshop on Applied Physics – Constanta, Romania, 2019

36. „Carbon-Titanium based multilayer nanostructures obtained by TVA method" - Ciupina Victor, Lungu Cristian P.,Vladoiu Rodica, Prodan Gabriel, Porosnicu Corneliu, Vasile Eugeniu, Prodan Madalina, Nicolescu Virginia, **Mandes Aurelia**, Dinca Virginia, et.al, SPIE Optics + Photonics 2019, San Diego, California, USA

37. „Titanium - Carbon Multilayer Nanostructures Obtained by Thermionic Vacuum Arc Method" - Ciupina Victor, Lungu Cristian P., Vasile Eugeniu, Prodan Gabriel, Porosnicu Corneliu, Vladoiu Rodica, **Mandes Aurelia**, Dinca Virginia, Nicolescu Virginia, Prodan Madalina, Manu Radu, 35th International Physics Congress of the Turkish Physical Society (TPS35) : Bodrum, Turkey, September 4-8, 2019

38. Synthesis and characterization of C/TI/C/AL/C/SI multilayer and C+TI/C+AL/C+SI composite thin films, Victor Ciupina, Rodica Vladoiu, Gabriel C. Prodan, Corneliu Porosnicu, Virginia Nicolescu, Veronica Satulu, Virginia Dinca, **Aurelia Mandes**, 21st International Balkan Workshop on Applied Physics, Constanţa, Romania, July 11-14, 2023

39. Complex nanostructures based on magnesium deposited by Laser-Induced Thermionic Vacuum Arc (LTVA) for high-efficiency electrodes, R. Vladoiu, **A. Mandes**, V. Dinca, S. Polosan, M. Tichy, P. Kudrna, 21st International Balkan Workshop on Applied Physics, Constanţa, Romania, July 11-14, 2023

40. Advanced materials magnesium-based obtained by implementation of a novel concept of laser-plasma technology, R. Vladoiu, **A. Mandes**, V. Dinca, S. Polosan, 1st Romanian-French Workshop on Non-Thermal Plasma, 30.08-2.09.2023, Magurele, Romania

Prezentari orale la Conferinţe naţionale

1. "Comparison view of nanostructured thin films obtained by Thermionic Vacuum Arc (TVA) technology in different configurations", R. Vladoiu, **A. Mandes**, V. Dinca, M. Contulov, Conferinta Nationala de Fizica (CNF), Constanta, Romania (2012)

2. Magnesium Based Innovative Cathodes for Active Matrices Displays Produced by the Laser-Induced Thermionic Vacuum Arc Technology (LTVA) – R. Vladoiu, V. Ciupina. V. Dinca-Balan, **A. Mandes-Vaduva**, CONFERINŢA ŞTIINŢIFICĂ NAȚIONALĂ DE PRIMĂVARĂ a AOSR, 2022, BUCURESTI - ERA DIGITALĂ – PROVOCĂRI ȘI OPORTUNITĂȚI PENTRU SOCIETATEA CONTEMPORANĂ, 6-7 mai 2022

3. R. Vladoiu, **A. Mandes**, V. Dinca, V. Ciupina, Advanced Materials Magnesium-Based obtained by Implementation bf The Concept bf Laser-Plasma Technology, CONFERINŢA ŞTIINŢIFICĂ NAȚIONALĂ DE PRIMĂVARĂ a AOSR, 19.23 mai 2023, BUCURESTI

4. R. Vladoiu, V. Ciupina, V. Dinca, **A. Mandes**, S. Polosan Advanced Materials Magnesium-Based MgX Type (X=Ti;Ag;Zn) Obtained by LTVA (Laser Induced Thermionic Vacuum Arc) Method CONFERINŢA ŞTIINŢIFICĂ NAȚIONALĂ DE Toamna a AOSR, 21.23 septembrie 2023, Constanta, Romania

Poster la Conferinţe Naţionale

1. *"Characterization and control of tantalum pentoxide (Ta_2O_5) thin films deposited by Thermionic Vacuum Arc (TVA) technology"*, R. Vladoiu, V. Ciupina, **A. Mandes**, V. Dinca, M. Contulov, C. P. Lungu, Conferinta Nationala de Fizica (CNF), Constanta, Romania (2012)

2. *"Systematic studies of the influence of the pressures on the double M-effect (monochromatization effect)",* R. Vladoiu, M. Contulov, **A. Mandes**, V. Dinca,Conferinta Nationala de Fizica (CNF), Constanta, Romania (2012)

3. *"Nanostructured C-Me thin films grown by Thermionic Vacuum Arc (TVA) method for high adhesion coatings"*, V. Ciupina, R. Vladoiu, **A. Mandes**, M. Contulov, M. Prodan, V. Zaroschi, C. P. Lungu, Conferinţa Naţională de Fizică (CNF) 2010, September 23-25 2010, Iaşi, Romania

4. *"Spectroscopic analysis on the carbon nanostructured thin films deposited by Thermionic Vacuum Arc (TVA) method",* R. Vladoiu, V. Ciupina, **A. Mandes**, C. Surdu-Bob, S. Saied, J. Sullivan, G. Musa, CNF 2008, 10 -13.09.2008, Magurele, Bucuresti.

Poster la Conferinţe Internaţionale

1. *Tribological Properties of Tungsten Thin Films Deposited by TVA on Silicon Samples and on Glass Substrates* – R.Vladoiu, V.Bursikova, A.Stoica, **A.Mandes**, G.Musa – Physics Conference TIM-06, 24-25.11.2006, West University, Timisoara, Romania.

2. *Preliminary results on comparative study of three methods for nanocarbon thin films deposited: Thermionic Vacuum Arc,magnetron sputtering and cathodic arc* – R. Vladoiu, M. Braic, A. Ioachim, C. Ducu, V. Ciupina, **A. Mandes**, V. Dinca, G. Pirpiliu, G. Prodan, G. Musa – IBWAP 2007, Constanta, Romania, July 6-8, (2007)

3. *Influence of the geometrical parameters for carbon thin film quality in three methods: TVA, Magnetron Sputtering and Cathodic Arc ~comparative view~* - R. Vladoiu, M. Braic, V. Ciupina, **A. Mandes**, V. Dinca, M. Contulov, G. Musa – Alexander von Humboldt, 8-9.07.2007, Ovidius University, Constanta, Romania.

4. *Influence of the distance between substrate and discharge on the quality of carbon thin films* – G. Musa, S. Pat, V. Ciupina, **A. Mandes**, I. M. Oancea – 14th Conference on Plasma Physics and Applications, 14-17.09.2007, Brasov, Romania.

5. *Influence of the geometrical parameters on the thickness of Carbon thin films deposited by Thermionic Vacuum Arc (TVA) technology* – G. Musa, R. Vladoiu, **A. Mandes**, V. Dinca, S. Pat, N. Ekem, XXVIII International Conference on Phenomena in Ionized Gases, July 15-20, Prague, Czech Republic, 2007.

6. *Raman spectroscopy of the DLC nanostructured films deposited by TVA method on different substrates* - R. Vladoiu, **A. Mandes**, A. Costache, J. Janik, G. Musa, Farphys 2007, 25.10.2007-27.10.2007, Iasi, Romania

7. *Investigation on the machanical properties of the carbon thin films deposited by TVA method* – R.Vladoiu, V.Bursikova, A. Mandes, V. Ciupina, G.Musa – Physics Conference TIM-07, 22-24.11.2007, West University, Timisoara, Romania.

8. *„Comparative study of DLC films deposited by Thermoionic Vacuum Arc and Magnetron Sputtering methods"*, R. Vladoiu, **A. Mandes**, V. Dinca, M. Contulov, G.Musa, C.E.A. Grigorescu, V.Braic, I.C. Vasiliu, M.Braic– EMRS – Strassburg, May 26-30,2008

9. *"The Double M-effect Induced by Noble Gases Activated with Negative Ions"***,** R. Vladoiu, M. Contulov, **A. Mandes**, G. Musa - 23rd Symposium on Plasma Physics and Technology Praga, Cehia June 16 – 19, 2008

10. *"TEM investigation of the C-Me multilayer nanocomposites deposited by thermionic vacuum arc (TVA) method"*, V. Ciupina, R. Vladoiu, **A. Mandes**, G. Musa, C. P. Lungu – IBWAP 2008, Constanta, Romania, July 7-9 2008

11. *"M-effect as a tool for leak – detection",* R. Vladoiu, M. Contulov, **A. Mandes**, G. Musa – Physiscs and chemistry of the atmosphere: from laboratory experiments to field campaigns, ECOLATMO, Constanta, Romania, 10.07-16.07.2008

12. *"Investigation of DLC hydrofobic character for biomedical applications",* R. Vladoiu, **A. Mandes**, V. Ciupina, G. Musa **–** The 3rd international school of advanced plasma technology, Varenna, Italy, 27.07-31.07.2008

13. *"Comparative study of two methods for nanocarbon films deposition: Thermionic Vacuum Arc and Magnetron Sputtering"***, A. Mandes**, V. Ciupina, G. Musa - BPU 2ndinternational physics projects competition for university students, Bodrum, Turkey, 18-20.08.2008

14. *„Characterization of nanostructured carbon-metal bilayers deposited by Thermionic Vacuum Arc (TVA) technology"*, R. Vladoiu, V. Ciupina, C. P. Lungu, O.I. Pompilian, P. Chiru, A. M. Lungu, G. Prodan, **A. Mandes**, G. Musa - II CESPC, August 31 - September 4, 2008, Brno, Czech Republic

15. *"High resolution electron microscopic studies of the nanostructured carbon based thin films",* V. Ciupina, R. Vladoiu , **A. Mandes**, G. Prodan, G. Musa - Physics Conference TIM-08, 22-24.11.2008, West University, Timisoara, Romania.

16. *Morphological and structural characterization of the C-W nanocomposites* – R. Vladoiu, V.Ciupina, **A. Mandes**, V. Dinca, C. Porsnicu, C.P. Lungu – 17th Symposium on Application of Plasma Processes- SAPP, 17-22.01.2009, Liptovsky Jan, Slovacia.

17. *"Structure and tribological properties of carbon based nanocomposites grown by TVA method"* - R. Vladoiu, V. Ciupina, M. Contulov, **A. Mandes**, V. Dinca, G. Prodan, C.P. Lungu - EMRS – Strassburg, June 8-12, 2009

18. "*Control of the nanometer- sized crystalline grains embedded in amorphous carbon based matrix as thin films obtained by Thermionic Vacuum Arc*" - R. Vladoiu, V. Ciupina, **A. Mandes -** EMRS – Strassburg, June 8-12, 2009

19. „*TEM characterization of carbon-tungsten thin films deposited by Thermionic Vacuum Arc (TVA) technology*" **–** V. Ciupina, R. Vladoiu, G. Prodan, **A. Mandes**, Cristian P Lungu **–** Nanotech Insight 2009, Barcelona**,** Spain , 29 March - 2 April 2009

20. „*Properties of tantalum oxide thin films deposited by Thermionic Vacuum Arc (TVA) method*" **–** R. Vladoiu, V. Ciupina, **A. Mandes**, G. Musa **–** IBWAP, Constanta, Romania, 6-8 July 2009

21. „*Optical investigation of the M-Effect in* $He_x - Ne_{1-x} - H_2$ *mixtures*" – R. Vladoiu, M. Contulov, V. Dinca, **A. Mandes**, G. Musa - IBWAP, Constanta, Romania, 6-8 July 2009

22. „*Surface characterization of the carbon thin films deposited by two different methods: Thermionic Vacuum Arc (TVA) and magnetron sputtering (MS)"* – R. Vladoiu, M. Braic, V. Braic, V. Dinca, **A. Mandes**, M. Contulov, G. Musa - IBWAP, Constanta, Romania, 6-8 July 2009

23. *„Characterization of the tantalum oxide thin films deposited by Thermionic Vacuum Arc (TVA) method***" –** R. Vladoiu, V. Ciupina, **A. Mandes**, G.Musa – Romanian Conference on Advanced Materials: ROCAM 2009, Brasov, Romania, 25-28 August 2009

24. *„Structural and morphological properties of the carbon based nanostructures deposited by Gaseous Thermoionic Vacuum Arc (GTVA) method"*, R. Vladoiu, V. Ciupina, **A. Mandes**, V. Dinca, M. Contulov, G. Musa, European Materials Research Society (E-MRS 2010), June 7-11 (2010) Strasbourg, France

25. *"Optical Investigation of the Multiple Monochromatization (M-effect) Signal in Mixed Noble Gases with Hydrogen Discharge"*, R. Vladoiu, M. Contulov, **A. Mandes**, G. Musa, 15th Conference on Plasma Physics and Applications (CPPA 2010), July 1-4 (2010) Iasi, Romania

26. *„Surface Activation of Synthetic Polymer Materials by Atmospheric Pressure Plasma Generated in Dielectric Barrier Discharge (DBD) in Air and Helium"*, R. Vladoiu, V. Dinca, **A. Mandes**, V. Ciupina, , 15th Conference on Plasma Physics and Applications (CPPA 2010), July 1-4 (2010) Iasi, Romania

27. *"Growth and characterization of the C-Si nanocomposites using thermionic vacuum arc (TVA) method"*, R. Vladoiu, V. Ciupina, C. P. Lungu, V. Dinca, **A. Mandes**, IBWAP 2010, July 7-9 (2010) Constanta, Romania

28. *"Influence of Helium in the Double M-Effect (Monochromatization Effect)"*, R. Vladoiu, M. Contulov, **A. Mandes**, IBWAP 2010, July 7-9 (2010) Constanta, Romania

29. *„Surface activation of the polycarbonate in atmospheric pressure plasma generated in air and Helium by Surface Dielectric Barrier Discharge (SDBD)",* R. Vladoiu, V. Dinca, **A. Mandes**, M. Cernak, SAPP XVIII,Vratna Dolina, Slovacia (2011)

30. *"Effect of helium addition in the double M-effect (monochromatization effect)"*,R. Vladoiu, M. Contulov, **A. Mandes**, SAPP XVIII,Vratna Dolina, Slovacia (2011)

31. *"Applications of the TVA technology in different electrodes configuration for nanometer-scaled thin films deposition",*R. Vladoiu, V. Ciupina, V. Dinca, M. Contulov, **A. Mandes**, C.P. Lungu, EMRS 2011, Nisa, Franta (2011)

32. *„Analysis of morphology and related properties of Csi thin films deposited by Thermionic Vacuum Arc (TVA) method"*,R. Vladoiu, V. Ciupina, **A. Mandes**, M. Contulov , IBWAP 2011, Constanta, Romania, July 6-8, (2011)

33. *„Influence of Helium on the surface activations of the polymers in atmospheric pressure plasma ignited in SDBD"*, R. Vladoiu, V. Dinca, **A. Mandes**, M. Cernak, IBWAP 2011, Constanta, Romania, July 6-8, (2011)

34. *„Properties of C-W thin films deposited by Thermionic Vacuum Arc (TVA) method"*, R. Vladoiu, V. Ciupina, P. Popov, **A. Mandes**, M. Contulov, V. Dinca, C. P. Lungu, IBWAP 2011, Constanta, Romania, July 6-8, (2011)

35. *„Complex Cu-Ni Fe Films obtained by TVA method"*, I. Prioteasa, V. Ciupina, I. M. Oancea-Stanescu, G. Prodan, C. Stefanov, M. Contulov, V. Dinca, **A. Mandes**, IBWAP 2011, Constanta, Romania, July 6-8, (2011)

36. *"Mechanical properties of the nanostructured SiC thin films synthetized by Thermionic Vacuum Arc (TVA) method",* R. Vladoiu, V.Ciupina, V. Bursikova, C. P. Lungu, V. Dinca, M. Contulov, **A. Mandes**, EMRS 2012,Strasburg, Franta (2012)

37. *"Investigation of polymers surface treated with SDBD Helium plasma",* R. Vladoiu, V. Dinca, **A. Mandes**, M. Contulov, Balkan Physical Union (BPU2012), Constanta, Romania (2012)

38. *"Morphological and mechanical characterization of hydrogenated DLC (a-C:H) films synthesized using Magnetically Gaseous Thermionic Vacuum Arc (MGTVA) technology",* R. Vladoiu, C. P. Lungu, M. Contulov, V. Dinca, **A. Mandes**, V. Bursikova, Balkan Physical Union (BPU2012), Constanta, Romania (2012)

39. *"Morphological investigation of the Mg thin films deposited by Thermionic vacuum Arc (TVA) technology",* R. Vladoiu, V. Ciupina, **A. Mandes**, V. Dinca, M. Contulov, G. Prodan, Balkan Physical Union (BPU2012), Constanta, Romania (2012)

40. *"Comparison view of carbon and tantalum pentoxide thin films characteristics deposited by Thermionic Vacuum Arc (TVA) technology at nanometric scale",***A. Mandes**, R. Vladoiu, M. Contulov, Conferinta Internationala NanotechItaly 2012,Venetia, Italia (2012)

41. *„Thermionic Vacuum Arc Nanotechnology Used for SiC Thin Films Deposition",*V. Dinca, R. Vladoiu, **A. Mandes**, Conferinta Internationala NanotechItaly 2012**,** Venetia, Italia (2012)

42. *„Growth and Morphological Properties of Pure Mg and Mg Embedded in Hydrogen-Free Amorphous Carbon (a-C) Matrix",*M. Contulov, R. Vladoiu, **A. Mandes**, G. Prodan,IBWAP 2013, Constanta, Romania (2013)

43. *„Substrate influence on the properties of SiC thin films deposited by Thermionic Vacuum Arc (TVA) method",***A. Mandes**, R. Vladoiu, V. Dinca, G. Prodan, V. Ciupina, IBWAP 2013, Constanta, Romania (2013)

44. „*Synthesis of reinforced magnesium embedded in carbon matrix by using Thermionic Vacuum Arc (TVA) technology*", R. Vladoiu, **A. Mandes**, V. Dinca, EMRS, Lille, Franta (2014)

45. "*Multifunctional relations between synthesis conditions, material nanostructure and thin films properties of Ti added in carbon matrix*", Vladoiu R., Dinca V., **A. Mandes**, G. Prodan – EMRS, Lille, Franta (2014)

46. "*Optical properties ofthe diamond-like hydrocarbons (DLHC) nanostructured thin films influenced by magnetically configuration*", R. Vladoiu, **A. Mandes**, V. Dinca, G. Prodan, Diamond, Barcelona, Spania (2014)

47. "*Synthesis and characterization of magnesium embedded in carbon matrix by using Thermionic Vacuum Arc (TVA) technology*" **A. Mandes**, Rodica Vladoiu, Virginia Dinca-IBWAP 2014 Constanta, Romania (2014)

48. "*Biomedical applications of polymers treated by DCSDBD*", Virginia Dinca, Rodica Vladoiu, **A. Mandes** - IBWAP 2014 Constanta, Romania (2014)

49. *"Nucleation of palladium nanostructures in platinum-nickel matrix"*, Lucian Petrăşescu, Victor Ciupină, Ştefan Gabriel Tutun, Rodica Vlădoiu, **Aurelia Mandes**, Virginia Dinca, Gabriel Prodan, Corneliu Poroşnicu, Eugeniu Vasile, Iulian Prioteasa, Radu Manu- IBWAP 2015 Constanta, Romania (2015)

50. *"Application of some carbon-tungsten based nanostructures in divertors coating from fusion reactor",* Ştefan Gabriel Tutun, Victor Ciupină Lucian Petrăşescu, Rodica Vlădoiu, **Aurelia Mandes**, Virginia Dinca, Gabriel Prodan, Corneliu Poroşnicu, Eugeniu Vasile, Iulian Prioteasa, Radu Manu - IBWAP 2015 Constanta, Romania (2015)

51. *"Properties of Mg2Si thin films obtained by Thermionic Vacuum Arc (TVA) method*", **Aurelia Mandes**, Rodica Vladoiu, Virginia Dinca Balan, Gabriel Prodan - IBWAP 2015 Constanta, Romania (2015)

52. *"Mechanical and topographycal characterization of C-Ag nanocomposite thin films obtained by Thermionic Vacuum Arc technology",* Virginia Dinca Balan, Rodica Vladoiu, **Aurelia Mandes**, Oana Ciuraru, Vilma Bursikcova - IBWAP 2015 Constanta, Romania (2015)

53. *"Small-angle neutron scattering (SANS) investigation on titanium based composites deposited by Thermionic Vacuum Arc (TVA) method",* R. Vladoiu, **A. Mandes**, V. Dinca, M. Balasoiu, D. Soloviov, CMNRS Constanta, Romania (2015)

54. *"Investigation of the Mg_2Si thin films obtained by Thermionic Vacuum Arc (TVA) method for industrial applications",* **Aurelia Mandes**, Rodica Vladoiu, Virginia Dinca-Balan, Gabriel Prodan, ICONSETE Viena Austria (2015)

55. „*Properties of the multicomponent thin films (binary–TiC/TiAg and ternary-TiCAg/TiCAl) deposited by Thermionic Vacuum Arc (TVA) technology*", **A. Mandes**, R. Vladoiu, C. P. Lungu, V. Dinca-Balan, C. Porosnicu, P. Dinca, EMRS Lille France (2016)

56. „*Growth of magnesium embedded in carbon matrix deposited by Thermionic Vacuum Arc (TVA) method*", **Aurelia Mandes**, Rodica Vladoiu, Virginia Dinca-Balan, Gabriel Prodan, THINFILMS2016 Singapore, Republica Singapore (2016)

57. "*Synthesis and characterization of the Ti-Mg nanocomposites obtained by Laser Thermionic Vacuum Arc (LTVA) method for biomedical applications*", **Aurelia Mandes**, Rodica Vladoiu, Virginia Dinca Balan, Gabriel Prodan, Global Biotechnology Congress 2016 – Boston, USA (2016)

58. „*Syntesis and characterization of the Ti-Cr nanocomposites deposited by Thermionic Vacuum Arc method*", **Aurelia MANDES**, Virginia DINCA, Rodica VLADOIU, Gabriel PRODAN - IBWAP 2016, Constanta, Romania, July 7-9, 2016

59. „*Hard coatings with high wetting angle*", V. Dinca Balan, **A. Mandes**, R. Vladoiu - IBWAP 2016, Constanta, Romania, July 7-9, 2016

60. „*Inclusion of palladium nanoparticles in platinum-nickel thin films*", Lucian Petrăşescu, Victor Ciupină, Ştefan Gabriel Tutun, Rodica Vlădoiu, **Aurelia Mandes**, Virginia Dinca, Gabriel Prodan, Corneliu Poroşnicu, Eugeniu Vasile, Iulian Prioteasa, Radu Manu - IBWAP 2016, Constanta, Romania, July 7-9, 2016

61. "*Characterization of the advanced tantalum oxide coatings deposited by TVA method for industrial applications*" - **Aurelia Mandes**, Rodica Vladoiu, Virginia Dinca, Gabriel Prodan, 2017, 17th IBWAP - Constanta, Romania

62. *"Carbon doped films obtained by Thermionic Vacuum Arc method"* - Virginia Dinca-Balan, Rodica Vladoiu, **Aurelia Mandes,** Gabriel Prodan, 2017, 17th IBWAP - Constanta, Romania

63. *"Growth and properties of MgSi thin films obtained by TVA technology"* - Virginia Dinca, Rodica Vladoiu, **Aurelia Mandes,** Gabriel Prodan, 2018, 18th IBWAP - Constanta, Romania

64. *"Synthesis of Mg-Zn coatings using Laser Thermionic Vacuum Arc method and their industrial applications"* - **Aurelia Mandes,** Rodica Vladoiu, Virgia Dinca-Balan, Paver Kudrna, Milan Tichy, 2018, 18th IBWAP - Constanta, Romania

65. *"Effects of carbon and silver on the nanostructure and morphological behavior of titanium based films"* - Virginia Dinca, Rodica Vladoiu, **Aurelia Mandes**, 2019, 19th IBWAP, Constanta, Romania

66. "Characterization of platinum based thin films deposited by Thermionic Vacuum Arc (TVA) method" - Sebastian Cozma, Rodica Vladoiu, **Aurelia Mandes**, Virginia Dinca, Gabriel Prodan, 2019, 19th IBWAP, Constanta, Romania

67. „Wettability of Ti based nanostructured thin films obtained by vacuum deposition" - Virginia DINCA, Rodica VLADOIU, **Aurelia Mandes**, 35th International Physics Congress, Bodrum, Turcia, 03-05 Sept 2019

68. Properties of magnezium zirconium thin films made by TVA and LTVA techniques, Rodica Vladoiu, Virginia Dinca, **Aurelia Mandes**, Silviu Polosan, Elena Matei, Bianca Mardare, 21st International Balkan Workshop on Applied Physics, Constanţa, Romania, July 11-14, 2023

h) Granturi/ proiecte de cercetare castigate prin competitive

Granturi/ proiecte de cercetare INTERNATIONALE ca DIRECTOR DE PROIECT

1. Proiect nr. 60/tema 04-4-1121-2015/2017 DUBNA 2017

"Magnetic properties and reflectometry studies of advanced nanomaterials based on magnesium and titanium deposited by TVA technology"

Granturi/ proiecte de cercetare INTERNATIONALE ca membru in echipa de cercetare

1. Proiect nr. 49/JINR Order No. 365/11.05.2021, DUBNA 2021
2. Proiect nr. 45/JINR Order No. 269/20.05.2020, DUBNA 2020

3. Proiect nr. 55/JINR Order No. 397/27.05.2019, DUBNA 2019
4. "Modèles thermocinétiques pour la croissance de Graphène et de Nanotubes de carbone par dépôt chimique en phase vapeur assisté par plasma", AUF-FRS Bulgarie 2017-2018
5. Proiect nr. 49/ JINR 04-4-1121-2015/2017 DUBNA 2017
6. Proiect nr 33/JINR order no /96/15.02.2016 DUBNA 2016
7. Proiect nr 83/JINR order no /96/15.02.2016 DUBNA 2016
8. Proiect nr 84/JINR order no /96/15.02.2016 -DUBNA 2016
9. Proiect nr. 47/ JINR Order No. 34/23.01.2015 DUBNA 2015
10. Proiect nr. 48/ JINR Order No. 34/23.01.2015 DUBNA 2015
11. Proiect nr. 24/JINR order no. 34/23.01.2015 DUBNA 2015

Granturi/ proiecte de cercetare NATIONALE ca membru in echipa de cercetare

Nr. crt.	Proiecte nationale	Cod/autoritate contractanta	Perioada	Valoare proiect (lei)
1	"Obtinerea materialelor avansate prin implementarea unui nou concept al tehnologiei Plasma - Laser" (INOVATECH)	**Proiect nr. 70/2017-PCE-Idei**	2017-2019	Titular unic UOC: 850 000
2	"Nanocompozite complexe pe baza de carbon si titan pentru aplicatii industriale (CREATIF) "PCCA-tip 2, 160/2012	**Proiect 160/2012 CREATIF/UEFISCDI**	2012-2016	3 000 000 din care UOC 1.100.000
3	"Cresterea si controlul granulelor cristaline dintr-o matrice de carbon printr-un concept nou al metodei TVA LTVA"	**Proiect 78/2013 LTVA /UEFISCDI**	2012-2016	UOC: 1 125 000
4	„Nanostructuri pe bază de carbon obţinute prin tehnologiile: Arc Termionic în Vid (TVA) şi Arc Termionic în Vid in Flux de Gaz (G-TVA) – studiu calitativ comparativ"	**Proiect 230/2007 GCARBTVA CNCSIS - IDEI**	2007-2010	759 532.5
5	"Studiul comparativ al calitatii straturilor nanostructurate de carbon depuse prin metodele: arc termoionic in	**Proiect 62/2006 CARBOCOMP /CERES -CEEX 2**	2006-2008	Total: din care UOC 575 000

	vid, arc catodic si pulverizare magnetron”			
6	“Tehnologii avansate pentru dezvoltarea straturilor antifricţiune ecologice de tip metal-carbon”	**Proiect 237/2006 TEHMEH /RELANSIN- CEEX**	2006-2008	105 000
7	„Materiale feroelectrice micro şi nanostructurate pentru memorii nevolatile”	**Proiect93/2006MAT FEROMEM/ MATNANTEH-CEEX**	2005-2008	82 000
8	“Cercetari avansate pentru producerea acoperirilor combinatoriale de interes pentru fuziune”	**Proiect CAPACIF 72-223 ANCS /2008**	2008-2011	42 794
9	Titlu: Nanostructuri complexe generate în plasma: obtinere si caracterizare	**Proiect 108/2006 NANOSTRUPL/ MATNANTEH-CEEX**	2006-2008	105 000