Lista lucrărilor publicate

Prof. univ. Dr. Rodica VLADOIU

A - TEZA DE DOCTORAT

A1. Anul 2004, conducator stiintific Dr MUSA GEAVIT, Universiatea din Bucuresti, Facultatea de Fizica, Titlu:"Contributii la folosirea metodei TVA (Thermionic Vacuum Arc) pentru depuneri de straturi subtiri de carbon".

B. CĂRŢI PUBLICATE

B1. **R. Vladoiu**,"**Tehnologii cu plasma"**, Ovidius University Press 2007, 317 pagini, ISBN 978-973-614-390-8

B2. R. Vladoiu, M. Braic **"Nanostructuri de carbon generate in plasma"**, Ovidius University Press, 2008, 221 pagini. ISBN 978-973-614

C. CAPITOLE PUBLICATE ÎN CĂRŢI

C1. R. Vlădoiu, A. Mandeş, 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**,** 2009

C2. 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** 9 pagini**,** (2012). pag 141-150, ISBN 978-1-61324-791-4.

C3 **R. Vladoiu**, C. Porosnicu, A. Mandes**,** I. Jepu, V. Dinca, A. Marcu, M. Lungu, G. Prodan, L. Avotina – "DLC Thin Films and Carbon Nanocomposite Growth by Thermionic Vacuum Arc (TVA) Technology" Chapter in "Diamond and Carbon Composites and Nanocomposites" Ed. INTECH, 22 pagini ,Chapter 5, pag 107-129 (2016) ISBN 978-953-51-2453-5

D. LUCRARI DE LABORATOR

D1. **R. Vladoiu**, **"Fizica plasmei si aplicatii***" Ovidius University Press,* 132 pagini , (2010), ISBN 978-973-614-536-0;

D2. R. Vladoiu A. Mandes "Spectroscopie si laseri", *Ovidius University Press, 127 pagini (2016),* ISBN 978-973-614-900-9

E. VOLUME PUBLICATE CA EDITOR

E1VOL: 17th European Conference on Atomic and Molecular Physics of Ionized Gases in **PLASMA SOURCES SCIENCE & TECHNOLOGY** Vol: 14, Issue: 2, Published: MAY 2004

E2 GUEST EDITOR of Special Issue *"Carbon-Refractory Metals Nanostructures: Synthesis, Characterization and Applications***" in MATERIALS** (IF =3.057), 2020 ISSN 1996-1944)

E3 GUEST EDITOR of Special Issue "*Thin Film Coatings for Multifunctional Applications***" in COATINGS** (IF =2.436), 2020, ISSN 2079-6412
E4 GUEST EDITOR of Special Issue "Applied Physics and Nanomaterials" in Nanomaterials - R. Vladoiu, S. Polosan and M. Tichy **(IF =5.719)**, 2022, ISSN 2079-4991

F – ARTICOLE IN REVISTE COTATE ISI CU FACTOR DE IMPACT

F.1 **VLADOIU, R**.; MANDES, A.; DINCA, V.; MATEI, E.; POLOSAN, S., *Synthesis of cobalt-nickel aluminate spinels by LTVA method and thermal annealing processes*, **NANOMATERIALS**, 2022, 2022, *12*(21), 3895; DOI: 10.3390/nano12213895

F.2 **Vladoiu, R.,** Mandes, A.; Dinca, V.; Ciupina, V.; Matei, E.; Polosan, S. *The Synergistic Effect of the Laser Beam on the Thermionic Vacuum Arc Method for Titanium-Doped Chromium Thin Film Deposition***, COATINGS,** 2022, Vol. *12 issue 4* DOI 10.3390/coatings12040470

F.3 Polosan, S, Ciobotaru, CC, Ciobotaru, IC, Enculescu, M, Iosub, D, Mandes, A, **Vladoiu, R** *Electron Irradiation of Titanium-Doped Chromium Nanostructured Thin Films for Higher Conductive Electrodes*, **IEEE TRANSACTIONS ON NANOTECHNOLOGY**, Vol.21, Page 823 829, DOI10.1109/TNANO.2022.3227366

F.4 V. Ciupina, C. P. Lungu, **R. Vladoiu,** G Prodan C. Porosnicu, E Vasile, M Prodan V. Nicolescu, V. Dinca, O. Cupsa, A. Velea R. Manu *Synthesis and characterization of some C-Ti based multilayer and composite nanostructures*, **JOURNAL OF OVONIC RESEARCHES, 2022,** Vol.: 18, Issue: 2, pag 177-186 DOI:10.15251/JOR.2022.182.177

F.5 **Vladoiu, R**.; Mandes, A; Dinca, V.; Kudrna, P.; Tichý, M.; Polosan, S. *Magnesium-silver cathodes for efficient charge-injection into Organic Light Emitting Diodes deposited by LTVA method*. **J. ALLOYS & COMP**. 2021 *869* 159364, https://doi.org/10.1016/ j.jallcom. 2021.159364

F.6 **R. VLADOIU**, M. Tichy, A. MANDES, V. DINCA, P. Kudna, *Thermionic Vacuum Arc (TVA), a versatile technology for thin film deposition and its applications*, 2020, **COATINGS**, Volume: 10 Issue: 3 Article Number: 211, DOI: 10.3390/coatings10030211 IF 2.436

F.7 **R. VLADOIU**, A. MANDES, V. DINCA, B. Maria Soloviov D., Turchenko Vitally, *Synthesis and characterization of the complex nanostructured thin films based on titanium for industrial applications* **MATERIALS**, 2020, Volume: 13, Issue: 2, 399 DOI: 10.3390/ma13020399 IF 3.057

F.8 S. Cozma, **R. Vladoiu**, A Mandes, VD Balan, G Prodan, V. Bursikova *Characterization of Platinum-Based Thin Films Deposited by Thermionic Vacuum Arc (TVA) Method*, **MATERIALS** 2020, Vol: 13 Issue: 7, Article Number: 1796, DOI: 10.3390/ma13071796 IF 3.057

F.9 V. Ciupina, C. P. Lungu, **R. Vladoiu**, C. Porosnicu, E Vasile, V. Nicolescu, A. Mandes, V. Dinca, O. Cupsa, *Carbon-Titanium Nanostructures: Synthesis and Characterization*, **PHYSICA SCRIPTA**, 2020 Vol.: 95, Issue: 4, Article Number: 044012 DOI: 10.1088/1402-4896/ab6d45 IF 1.985

F.10 R. Vladoiu, A. Mandes, V. Dinca, G. Prodan, P. Kudna, M. Tichy, *Plasma diagnostics and characterization of the Mg and Mg-Zn thin films deposited by TVA method*, **VACUUM,** 2019**,** vol 167, p 129-135, DOI: 10.1016/j.vacuum.2019.06.002 **IF 2.906**

F.11 R. Vladoiu, A. Mandes, V. Dinca-Balan, V. Bursikova, *Structural and Mechanical Properties of Nanostructured C-Ag Thin Films Synthesized by Thermionic Vacuum Arc Method* **JOURNAL OF NANOMATERIALS**, 2018, Volume 2018, Article ID 9632041, 10 pages, ISSN: 1687-4110

F.12 A. Mandes, **R. Vladoiu,** G. Prodan V., Dinca, , Porosnicu, C, Dinca, P, *The Properties of Binary and Ternary Ti Based Coatings Produced by Thermionic Vacuum Arc (TVA) Technology***, COATINGS,** 2018, Volume: 8 Issue: 3 Article Number: 114 ISSN: 2079-6412 **IF 2.436**

F.13 Kichanov, S, Pantelica, A, Pantelica, D, Stolyar, S, Iskhakov, R Aranghel, D. Ionescu, **R. Vladoiu** M. Balasoiu, *Structural and compositional specifications on biogenic ferrihydrite nanoparticles production by klebsiella oxytoca*, **ROMANIAN REPORTS IN PHYSICS,** 2018, Volume: 70 Issue: 4 Article Number: 511, ISSN:1221-1451 **IF 2.147**

F.14 R. Vladoiu, A Mandes, VD Balan, V. Bursikova, *Structural and Mechanical Properties of Nanostructured C-Ag Thin Films Synthesized by Thermionic Vacuum Arc Method***, JOURNAL OF NANOMATERIALS,** 2018, Article Number: 9632041, ISSN**:** 1687-4110 **IF 1.980**

F.15 Dinca-Balan, V, **Vladoiu, R** Mandes, A, Prodan, G **,** *Correlation study of nanocrystalline carbon doped thin films prepared by a thermionic vacuum arc deposition technique*, **JOURNAL OF PHYSICS D-APPLIED PHYSICS** 2017, Volume: 50 Issue: 43 Article Number: 435305, ISSN: 0022-3727 **IF 3.169**

F.16 R. Perekrestov, P Kudrna, S. Danis, M. Tichy, I Bieloshapka**, R Vladoiu,** *Application of microcracked columnar TiO2 thin films deposited by DC hollow cathode plasma jet in dye-sensitized solar cells***, JOURNAL OF VACUUM SCIENCE & TECHNOLOGY A,** 2017 Volume: 35 Issue: 6 Article Number: 061307, ISSN: 0734-2101 **IF 2.166**

F.17 R. Vladoiu, A Mandes, VD Balan, G. Prodan, V Ciupina, *Synthesis of reinforced magnesium embedded in carbon matrix by using Thermionic Vacuum Arc (TVA) technology*, **ROMANIAN REPORTS IN PHYSICS,** 2016, Volume: 68 Issue: 3 Pages: 1076-1084, ISSN: 1221-1451 **IF 2.147**

F.18 R. Perekrestov, P. Kudrna, M. Tichy, I. Khalakhan, S. Danis, G. Prodan, **R. Vladoiu** *Crystalline structure and morphology of TiO2 thin films deposited by means of hollow cathode plasma jet with supporting anode*, **SURFACE & COATINGS TECHNOLOGY**, 2016, Vol: 271, Pag: 123-129, ISSN: 0257-8972, **IF 3,784**

F.19 R. Vladoiu, A Mandes, VD Balan, G. Prodan, P Kudrna, M. Tichy, *Magnesium plasma diagnostics by heated probe and characterization of the Mg thin films deposited by thermionic vacuum arc technology* **PLASMA SOURCES SCIENCE & TECHNOLOGY** 2015, Vol: 24, Issue: 3, P: 35008-35008, ISSN: 0963-0252, **IF 3.591**

F.20 L. Petrasescu, V. Ciupina, S. G. Tutun, **R. Vladoiu,** G. Prodan, C. Porosnicu, E. Vasile, I. Prioteasa, R. Manu, *Carbon - platinum nanostructured catalysts for hydrogen fuel cells***, J.**

OF OPTOEL. AND ADV. MATER (2015) Vol 17, Issue 9-10, Pag.1464-1470, ISSN: 1454-4164, **IF 0.429**

F.21 SG. Tutun, L. Petrasescu, **R. Vladoiu,** G Prodan, CP Porosnicu, E. Vasile, I Prioteasa, R Manu, V Ciupina, *Application of some carbon-aluminium based nanostructures obtained by TVA method in divertors coating from fusion reactor* **, J. OF OPTOEL. AND ADV. MATER** (2015) Vol: 17, Issue: 7-8, P: 1064-1069, **IF 0.429**

F.22 A. Mandes, **R. Vladoiu,** V. Dinca, G. Prodan, *Binary C-Ag Plasma Breakdown and Structural Characterization of the Deposited Thin Films by Thermionic Vacuum Arc Method* **IEEE TRANSACTIONS ON PLASMA SCIENCE** (2014), Vol:42 , Issue: 10, 2806 – 2807, ISSN: 0093-3813, **IF 1.101**

F.23 C. Porosnicu, C. P. Lungu, I. Jepu, O.G. Pompilian , P. Dinca, C. Luculescu, G. Prodan, A. Marin, A. Vladescu, **R. Vladoiu** *Characterization of ternary C-Si-Al nanocomposite thin films obtained by TVA method* **DIGEST JOURNAL OF NANOMATERIALS AND BIOSTRUCTURES** (2014), Vol. 9, No. 2, p. 765 – 775 ISSN: 1842-3582, **IF 0.945**

F.24 V. Ciupina, C.P. Lungu, **R Vladoiu,** G Prodan, C Porosnicu, M Belc, IM Stanescu, E. Vasile, R. Rughinis *Silicon carbide multilayer protective coating on carbon obtained by Thermionic Vacuum Arc method*, **JOURNAL OF NANOPHOTONICS**, 2014Vol: 8, Article Number: 083996 DOI: 10.1117/1.JNP.8.083996, ISSN: 1934-2608, **IF 1.686**

F.25 V Ciupina, I Morjan, **R. Vladoiu,** CP. Lungu, C Porosnicu, I. Jepu, G Prodan, I.M. Stanescu, A. Mandes, M. Contulov, V. Dinca, M. Prodan, V. Nicolescu *Application of carbon-tungsten, carbon-beryllium and carbon-aluminium nanostructures in divertors coatings from fusion reactor* **, J. OF OPTOEL. AND ADV. MATER**, 2013, Vol: 15, Issue: 11-12, Pages: 1450-1456, ISSN: 1454-4164, IF 0.563

F.26 V. Ciupina, **R. Vladoiu,** C.P. Lungu, V. Dinca, M. Contulov, A. Mandes, P. Popov and G. Prodan, *Investigation of the SiC thin films synthetized by Thermionic Vacuum Arc method (TVA),* **EUROPEAN PHYSICAL JOURNAL D**, 2012, Vol. 66, No. 4 p 89, ISSN: 1434-6060 , IF 1.513

F.27 R. Vladoiu, V. Ciupina , M. Contulov, V. Dinca, A. Mandes ,V. Bursikova, *Synthesis and Characterization of Nanostructured a-C:H Thin Films by Gaseous Thermionic Vacuum Arc (G-TVA) Deposition Technique*, **PLASMA CHEMISTRY PLASMA PROCESS**,2012 Vol 32, 2, pag. 219-229, ISSN: 0272-4324,IF 1,728

F.28 R Vladoiu, V. Ciupina, M Contulov, A Mandes, V. Dinca, M. Prodan, *HRTEM Images of a-C:H Thin Films Deposited by G-TVA Technique* **IEEE TRANSACTIONS ON PLASMA SCIENCE** (2011), vol 39 issue 11, pag 2802–2803, ISSN: 0093-3813, IF 1.174

F.29 V Ciupina, J Sullivan, S Saied, **R Vladoiu,** G Prodan, I.M. Oancea-Stanescu, A Mandes, M Contulov, V Dinca, M Prodan, D. Manole "*Synthesis and Characterization of Some Carbon Based Nano-structures*" **CONTRIBUTIONS TO PLASMA PHYSICS** (2011), Vol: 51 Issue: 6 Pages: 546-553, ISSN: 0863-1042, IF 1.108

F.30 A. Stoica, **R. Vladoiu,** G. Musa, V. Ciupina, M. Contulov, V. Bursikova, O .Blahova, *Mechanical properties of thin films deposited by TVA and G-TVA methods* **CHEMICKE**

LISTY (2011) Vol:105 Special Issue: SI Supplement: 2 Pages: S132-S135 , ISSN: 0009-2770, IF 0.529

F.31 R. Vladoiu, V. Ciupina, A. Mandes, M. Contulov, V. Dinca, P. Popov, C. P. Lungu, *Tribological properties of carbon-tungsten nanocomposites synthetized by Thermionic Vacuum Arc (TVA) method* **ROMANIAN REPORTS OF PHYSICS** (2011), Vol: 63, Issue: 4 P: 1053-1060, ISSN: 1221-1451, IF 0.500

F.32 R. Vladoiu, V. Ciupina, A. Mandes, V. Dinca, M. Prodan, G. Musa *Growth and characteristics of tantalum oxide thin films deposited using thermionic vacuum arc technology* **JOURNAL OF APPLIED PHYSICS**, (2010) vol 108, Article number 093301 ISSN 0021-8979, IF 2.079

F.33 R. Vladoiu, M. Contulov, V. Ciupina, G. Musa "*Multiple M-Effect Signal in Noble Gases and Hydrogen Mixture Discharge*", **CONTRIBUTIONS TO PLASMA PHYSICS** (2010), Vol.50, Issue 2, pag.177 – 181 ISSN: 0863-1042, IF 1.006

F.34 R.Vladoiu, V. Ciupina, M.Contulov, A.Mandes, V. Dinca, G. Prodan, C. P Lungu, *Structure and tribological properties of carbon based nanocomposites grown by TVA method,* **, J. OF OPTOEL. AND ADV. MATER** 2010, Vol. 12 , no. 3,P 553-556 , ISSN: 1454-4164, IF 0.412

F.35 G. Horvath J. D. Skalny J. Orszagh **R. Vladoiu** N. J. Mason "*Influence of the Outer Electrode Material on Ozone Generation in Corona Discharges*", **PLASMA CHEMISTRY AND PLASMA PROCESSING** (2010) Vol 30, issue 1: pag 43–53, ISSN: 0272-4324, IF1.798

F.36 R. Vladoiu, M. Contulov, A. Mandes, G. Musa "*The double m-effect induced by noble gases activated with negative ions*" **EUROPEAN PHYSICAL JOURNAL D** (2009), vol 54, no 2, p 287-291, ISSN: 1434-6060, IF1.420

F.37 R. Vladoiu, V. Dinca, G. Musa "*Surface energy evaluation of unhydrogenated DLC thin film deposited by thermionic vacuum arc (TVA) method*" **EUROPEAN PHYSICAL JOURNAL D**, (2009),, vol 54, no2, p 433–437, ISSN: 1434-6060,IF 1,420

F.38 G Horvath, J D Skalny, N J Mason, M Klas, M Zahoran, **R Vladoiu** and M Manole "*Corona discharge experiments in admixtures of N_2 and CH_4: a laboratory simulation of Titan's atmosphere*" **PLASMA SOURCES SCIENCE & TECHNOLOGY** 2009, vol. 18, no3,article number 034016, ISSN: 0963-0252, IF 2,384

F.39 N. Ekem, S.Korkmaz, S.Pat, M. Z. Balbag, N. E. Cetin, M. Ozmumcu, **R. Vladoiu,** G.Musa, *ZnO thin film preparation using RF sputtering at various oxygen contents,* **, J. OF OPTOEL. AND ADV. MATER** 2008, Vol.10, Issue: 12, P3279-3282, ISSN: 1454-4164, IF 0.577

F.40 V. Ciupina, **R. Vladoiu,** A. Mandes, G. Musa, C. P. Lungu,*TEM investigation of the C-Me multilayer nanocomposites deposited by Thermionic Vacuum Arc (TVA) method*, **, J. OF OPTOEL. AND ADV. MATER** 2008, Vol.10, Issue: 11, P 2958-2962, ISSN: 1454-4164, IF 0.577

F.41 J D Skalny, A Stoica, J Orszagh, **R Vladoiu**, N J Mason "*Positive and negative corona discharges in flowing carbon dioxide*", **JOURNAL OF PHYSICS D-APPLIED PHYSICS** (2008) , Vol 41 , Issue 17, article number 175211, ISSN: 0022-3727, IF 2.104

F.42 C. Surdu Bob, **R. Vladoiu,** M. Badulescu, G. Musa „*Control over the sp2/sp3 ratio by tunning plasma parameters of the thermionic Vacuum Arc*", **DIAMOND AND RELATED MATERIALS** 2008 , Vol 17, Issues 7-10, 1625-1628, ISSN: 0925-9635, IF 2.092

F.43 V. Kuncser, M. Valeanu, G. Scanteie, G. Filoti, I. Mustata, C. P. Lungu, A. Anghel, H. Chiriac, **R. Vladoiu**, J. Bartolomeu, "*Exchange Bias and spin valve systems with Fe-Mn antifferomagnetic priming layers, obtained by TVA method*", **JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS** (2008), Vol 320, Issue 14, P 226-230, ISSN: 0304-8853, IF 1.283

F.44 S. Pat, Z. Balbag, I. Cenik, N.Ekem, S. Okur, **R. Vladoiu,** G. Musa *Carbon deposition on the stainless steels substrates using pulsed plasma*, **, J. OF OPTOEL. AND ADV. MATER**, 2008, Vol.10, Issue: 3, P 663-664, ISSN: 1454-4164, IF 0.577

F.45 N. Ekem, G.Musa, S. Pat, Z. Balbag, I. Cenik, **R. Vladoiu,** *Carbon thin film deposition by Thermionic Vacuum Arc (TVA),* **, J. OF OPTOEL. AND ADV. MATER** 2008 Vol. 10, Issue: 3, P 672-674, ISSN: 1454-4164, IF 0.577

F.46 M. Z. Balbag, S.Pat, I. Cenik, N. Ekem, T. Akan, B. Baksan, **R. Vladoiu,** G. Musa, *Titanium oxidation by pulsed oxygen plasma,* **, J. OF OPTOEL. AND ADV. MATER** 2008Vol.10, Issue: 3, P 680-682, ISSN: 1454-4164, IF 0.577

F.47 R. Vladoiu, V. Ciupina, A. Mandes, V. Dinca, M. Contulov, G. Prodan, G.Musa, *Preliminary results on comparative study of three methods for nanocarbon films deposition: thermionic vacuum arc, magnetron sputtering and cathodic arc,* **, J. OF OPTOEL. AND ADV. MATER**, 2008 Vol. 10, Issue: 3, P 723-726, ISSN: 1454-4164, IF 0.577

F.48 G. Musa, **R. Vladoiu,** C. Surdu Bob, A. Mandes *The M-effect, a synergetic result of three body collisions and metastable/resonance radiation trapping*, **OPTOELECTRONICS AND ADVANCED MATERIALS-RAPID COMMUNICATIONS** (2008)Vol: 2, Issue: 3P: 176-177 , ISSN: 1842-6573, IF0.224

F.49 J. D Skalny, S Matejcik, J, Orszagh, **R. Vladoiu,** N. J. Mason, *A study of the physical and chemical processes active in corona discharges fed by carbon dioxide*, **OZONE-SCIENCE & ENGINEERING** (2008), Vol: 30, Issue: 2, P: 145-151, ISSN: 0191-9512, IF 0,981

F.50 R. Vladoiu V. Ciupina, C.P. Lungu, OI Pompilian,; P Chiru, AM Lungu, G. Prodan, A Mandes,; G. Musa, *Characterization Of Nanostructured Carbon-Metal Bilayers Deposited By Thermionic Vacuum Arc (TVA) Technology* **CHEMICKE LISTY** 2008,, Vol 102 Special Issue: SI 4 Pages: S1482-S1485, ISSN: 0009-2770, IF 0.593

F.51 R. Vladoiu V. Ciupina, V. Dinca, G. Musa, *Influence of the operational parameters on the wettability of the DLC films deposited by TVA method* **CHEMICKE LISTY** 2008,Vol 102 Special Issue: SI 4 Pages: S1463-S1466 , IF 0.593

F.52 **R. Vladoiu,** M. Contulov, G. Musa Double Monochrome Signal (Double M-Effect) In Pulsed Ne-Ar-H-2 Mixture Discharges **CHEMICKE LISTY**, (2008), Vol 102 Special Issue: SI 4 Pages: S1452-S1455, IF 0.593

F.53 J. D.Skalny, J.Orszagh, G. Horvath, N. J. Mason, **R. Vladoiu** *The DC corona discharges in flowing dry and humid carbon dioxide* **, J. OF OPTOEL. AND ADV. MATER**, 2008,, Vol. 10, Issue: 1, P 117-123, ISSN: 1454-4164, IF 0.577

F.54 S.Pat, N.Ekem, Z. Balbag, M. Cenik, **R. Vladoiu,** G. Musa, *M-effect generating of two-spectral lines,* **, J. OF OPTOEL. AND ADV. MATER** 2008,Vol.10, Issue: 1, P 229-231, IF 0.577

F.55 G. Musa, **R. Vladoiu,** M. Contulov, V. Dinca *Reports on the M-effect - General character and explanation of the involved elementary processes,* **ROMANIAN REPORTS IN PHYSICS** (2008),Vol: 60,Issue: 3, P: 627-634 , ISSN: 1221-1451, IF0.458

F.56 G.Musa, C.Surdu-Bob, **R.Vladoiu,** *A double monochromatization effect in low temperature plasmas,* **, J. OF OPTOEL. AND ADV. MATER** 2007, Vol. 9, Issue: 8, P 2653-2656, ISSN: 1454-4164, IF0.827

F.57 C. Surdu-Bob, G.Musa, **R. Vladoiu**, C. P.Lungu, *The synthesis of DLC using a novel cathodic arc technique: Gas-TVA* **, J. OF OPTOEL. AND ADV. MATER**, 2007, Vol. 9, Issue: 8, P 2660-2662, ISSN: 1454-4164, IF0.827

F.58 **R.Vladoiu,** V.Ciupina, C. Surdu-Bob, C. P. Lungu, J. Janik, J. D. Skalny, V. Bursikova, J. Bursik, G.Musa *Properties of the carbon thin films deposited by thermionic vacuum arc,* **, J. OF OPTOEL. AND ADV. MATER** 2007Vol. 9, Issue: 4, P 862-866, ISSN: 1454-4164, IF0.827

F.59 G.Musa, C.Bob Surdu, C. P. Lungu, V.Ciupina, **R.Vladoiu**, *Gaseous Thermionic Vacuum Arc(G-TVA) - an extension of TVA (Thermionic Vacuum Arc) input materials from solid samples to gases and liquids for carbon thin film deposition,* **, J. OF OPTOEL. AND ADV. MATER**, 2007, Vol. 9, Issue: 4, P 867-870, ISSN: 1454-4164, IF0.827

F.60 G.Musa, N.Ekem, S. Pat, M. Z. Balbag, M. I. Cenik, T. Akan, V. Ciupina, **R. Vladoiu,** M. Tanisli, O.Ozen, *Carbon synthesis in methane plasma*, **, J. OF OPTOEL. AND ADV. MATER** 2007,Vol. 9, Issue: 4, P 871-874, ISSN: 1454-4164, IF0.827

F.61 G.Musa, **R.Vladoiu,** N.Ekem, M. I. Cenik, S.Pat, M. Z.Balbag *Argon emission spectra change at molecular gas addition,* **, J. OF OPTOEL. AND ADV. MATER** , 2007, Vol. 9, Issue: 4, P 894-896, ISSN: 1454-4164, IF0.827

F.62 **R.Vladoiu,** C. P. Lungu, I. Mustata, V.Bursikova, J.Bursik, *Characterization by nanoindentation and Scanning Electron Microscopy of the spin valves structures prepared by Thermionic Vacuum Arc (TVA) method*, JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS , 2007,Vol. 9, Issue: 4, P 1087-1090, ISSN: 1454-4164, IF0.827

F.63 T. Akan, N. Ekem, S. Pat, U.G. Issever, M.Z. Balbag, M.I. Cenik, **R. Vlădoiu,** G. Musa, "*Boron thin film deposition by using thermionic vacuum arc (TVA) technology*", **MATERIALS LETTERS**, (2007) , vol. 61, Issue 1 pag. 23-26, ISSN: 0167-577X, IF 1,625

F.64 G.Musa, Surdu-Bob, C, **R. Vladoiu,** *Selective emission of a two-spectral lines in a.c. plasmas (M-effect)* **OPTOELECTRONICS AND ADVANCED MATERIALS – RAPID COMUNICATION** (2007), Vol: 1 Issue: 6 P: 305-306 ISSN: 1842-6573, IF0.224

F.65 J. D Skalny, S Matejcik, J, Orszagh, **R. Vladoiu,** N. J. Mason, *A study of the Physical and Chemical processes Active in Ozone Generation by Carbon Dioxide Fed Corona discharges*", **OZONE-SCIENCE & ENGINEERING** 2007, Vol 29, Issue 5, p 399-404, ISSN: 0191-9512, IF1.515

F.66 G. Musa, **R. Vladoiu,** V. Ciupina, C.P. Lungu, I Mustata, S. Pat, T. Akan, N. Ekem, *Characteristics of boron thin films obtained by TVA technology*, **, J. OF OPTOEL. AND ADV. MATER** 2006, Vol. 8, Issue: 2, P 617-620, ISSN: 1454-4164, IF1.106

F.67 G. Musa, **R. Vladoiu,** V. Ciupina, J. Janik, *Raman spectra of carbon thin films*, JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS 2006Vol. 8, Issue: 2, P 621-623, ISSN: 1454-4164, IF1.106

F.68 R. Vladoiu, V. Ciupina, C.P. Lungu, V. Bursikova, G.Musa, *Thermoionic vacuum arc (TVA) deposited tungsten thin film characterization*, JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS 2006, Vol. 8, Issue: 1, Pages: 71-73, ISSN: 1454-4164, IF1.106

F.69 C.P. Lungu, I. Mustata, G. Musa, A.M. Lungu, O. Brinza, C. Moldovan, C. Rotaru, R. Iosub, F. Sava, M. Popescu, **R. Vladoiu,** V. Ciupina, G. Prodan, N. Apetroaei,Unstressed carbon-metal films deposited by thermionic vacuum arc method, **, J. OF OPTOEL. AND ADV. MATER**, 2006, Vol. 8, Issue: 1, P 74-77, ISSN: 1454-4164, IF1.106

F.70 D. Galuska, D. Manole, **R. Vladoiu,** S. Matejcik, J.D. Skalny *Negative corona discharge in flowing N2O and its mixtures with N-2 and O-2*, JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS , 2005Vol. 7, Issue: 5, P 2371-2378, ISSN: 1454-4164, IF 1.138

F.71 G. Musa, I. Mustata, V. Ciupina, **R. Vladoiu,** G. Prodan, C.P. Lungu, H. Ehrich, *Thermionic vacuum arc (TVA) - Carbon thin film deposition*, JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS 2005, Vol. 7, Issue: 5, P 2485-2487, ISSN: 1454-4164, IF 1.138

F.72 T. Akan, N. Ekem, S.Pat, **R. Vladoiu,** G. Musa *Studies on the thermionic vacuum arc discharges in the vapors of Cu-Ag and Cu-Sn alloys*, **, J. OF OPTOEL. AND ADV. MATER** 2005, Vol. 7, Issue: 5, P 2489-2494, ISSN: 1454-4164, IF 1.138

F.73 S. Pat, N. Ekem, T. Akan, O. Kusmus, S. Demirkol, **R. Vladoiu,** C.P. Lungu, G. Musa, *Study on Termionic Vacuum Arc - A novel and advanced technology for surface coating*, JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS 2005, Vol. 7, Issue: 5, P 2495-2499, ISSN: 1454-4164, IF 1.138

F.74 G. Musa, I . Mustata, M. Blideran V. Ciupina, **R. Vlădoiu,** G. Prodan, E. Vasile, H Ehrich, „*Thermionic Vacuum Arc (TVA) new technique for high purity carbon thin film deposition*, **ACTA PHYSICA SLOVACA**, (2005), vol 55, no 4, Pag 417-421, ISSN: 0323-0465, IF 0.359

F.75 G. Musa, I. Mustata, V. Ciupina, **R. Vlădoiu,** G. Prodan, E. Vasile, H.Ehrich, Diamond like nanostructured carbon film deposition using Thermionic Vacuum Arc" vol.13 **DIAMOND AND RELATED MATERIALS** (2004) 1398-1401, Ed Elsevier, ISSN 0925-9635, IF 1.670

F.76 G. Musa, I. Mustata, M. Blideran, V. Ciupina, **R. Vladoiu,** G. Prodan, E. Vasile, *Nanostructured carbon thin films deposition using Thermionic Vacuum Arc (TVA) technology* JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS , 2003, Vol. 5, Issue: 3, P 667-673, ISSN: 1454-4164, IF 0.996

F.77 R. Vladoiu, G. Musa, I. Mustata, *Thermoionic vacuum arc - A new method of thin film deposition*, JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS 2003, Vol. 5, Issue: 1, P 325-330, , ISSN: 1454-4164, IF 0.996

G – ARTICOLE IN REVISTE COTATE ISI fara FACTOR DE IMPACT

G1 G. Musa, N. Ekem, T. Akan, M. Z Balbag, M. I. Cenik, **R. Vladoiu,** M. Ianisli, O Ozer *Investigation of carbon produced by methane pulsed discharge,* **PHYSICA STATUS SOLIDI**

G2 G. Musa, N. Ekem, T. Akan, M. Z Balbag, M. I. Cenik, **R. Vladoiu,** CURRENT TOPICS IN SOLID STATE PHYSICS**,** 2007, Vol 4, Issue 2, Pag 521-523, **ISSN:** 1610-1634, **DOI:** 10.1002/pssc.200673313

H. ARTICOLE IN CONFERENCE PROCEEDINGS - WEB OF KNOWLEDGE

H1 .V. Ciupina, C. P. Lungu, **R. Vladoiu,** G. Prodan, C, Porosnicu, et al., *Carbon-Titanium based multilayer nanostructures obtained by TVA method*, Book Series: **Proceedings of SPIE** NANOSTRUCTURED THIN FILMS XVII, 2019, Volume: 11089, Article Number: UNSP 110890N, DOI: 10.1117/12.2528663, ISBN:978-1-62841-724-1, ISSN: 0277-786X

H2 V. Ciupina, C. P. Lungu, **R. Vladoiu,** G. Prodan, C, Porosnicu, et al., *Characterization of C-Ti multilayer thin films obtained by TVA technology,* **Book Series: Proceedings of SPIE** NANOSTRUCTURED THIN FILMS XVIII**,** 2020, Volume: 11467, Article Number: 114671R, DOI: 10.1117/12.2567927, ISBN:978-1-62841-724-1, ISSN: 0277-786X

H3 V. Ciupina, C. P. Lungu,E. Vasile, G. Prodan, C, Porosnicu **R. Vladoiu**, , et al., *Titanium - Carbon Multilayer Nanostructures Obtained by Thermionic Vacuum Arc Method*, **AIP Conference Proceedings**, Conference TURKISH PHYSICAL SOCIETY Volume: 2178, Article Number: 030035, DOI: 10.1063/1.5135433, 35TH INTERNATIONAL PHYSICS CONGRESS (TPS35), SEP 04-08, Bodrum, TURKEY, 2019 ISSN 0094-243X

H4 V. Ciupina, C. P. Lungu, **R. Vladoiu,** G. Prodan, C, Porosnicu, et al., *Nanostructured Carbon-Titanium multilayer films obtained by Thermionic Vacuum Arc method*, Book Series: **Proceedings of SPIE** NANOSTRUCTURED THIN FILMS XI, 2018, Volume: 10731, Article Number: 1073107, DOI: 10.1117/12.2320474, ISBN:978-1-62841-724-1, ISSN: 0277-786X

H5 V. Ciupina, E. Vasile, C, Porosnicu **R. Vladoiu**, , et al., *Nitrogen Doped Silicon-Carbon Multilayer Protective Coatings on Carbon Obtained By Thermionic Vacuum Arc (TVA) Method*, **AIP Conference Proceedings**, Conference TURKISH PHYSICAL SOCIETY Volume: 1935, Article Number: 050001, DOI: 10.1063/1.5025973, TURKISH PHYSICAL SOCIETY 33RD INTERNATIONAL PHYSICS CONGRESS (TPS33)), SEP 06-10, Bodrum, TURKEY, 2019 ISSN 0094-243X

H6 V. Ciupina, C. P. Lungu,E. Vasile, G. Prodan, C, Porosnicu, **R. Vladoiu**, et al., *Carbon-Titanium Multilayer Films: Synthezis and Characterization*, **AIP Conference Proceedings**, Conference TURKISH PHYSICAL SOCIETY Volume: 2042, Article Number: 020034, DOI: 10.1063/1.5078906, TURKISH PHYSICAL SOCIETY 34TH INTERNATIONAL PHYSICS CONGRESS (TPS34), SEP 06-10, Bodrum, TURKEY, 2018 ISSN 0094-243X

H7 **R. Vladoiu**, A. Mandes, V. Dinca, G. Prodan, *Titanium-based thin films for protective coatings prepared by TVA (Thermionic Vacuum Arc) technology*, 5TH INTERNATIONAL CONFERENCE ON MECHANICAL, MATERIALS AND MANUFACTURING (ICMMM 2018) Book Series **MATEC Web of Conferences** Volume: 249, Article Number: 01005, DOI: 0.1051/matecconf/201824901005, Orlando, Florida, SUA, OCT 13-15, 2018, ISSN 2261-236X

H8 V. Ciupina, E. Vasile, C, Porosnicu, C. P. Lungu, **R. Vladoiu,** et al., *Nitrogen doped Silicon-Carbon multilayer protective coatings on Carbon obtained by TVA method*, Book Series: **Proceedings of SPIE** NANOSTRUCTURED THIN FILMS X, 2017, Volume: 10356, Article Number: UNSP 103560O, DOI: 0.1117/12.2272579, ISBN:978-1-62841-724-1, ISSN: 0277-786X

H9 V. Ciupina, Prioteasa, Ilie D, Manu R, Petrasescu L, Tutun, s, Dinca P, Mustata I, C. P. Lungu,Jepu I, Vasile E, V. Niculescu, **R. Vladoiu**, *Synthesis and Characterization of Coppe Cobalt/Copper/Iron Nanostructurated Films with Magnetoresistive Properties* **AIP Conference Proceedings**, Conference TURKISH PHYSICAL SOCIETY Volume: 1815, Article Number: 040001, DOI: 10.1063/1.4976370, PROCEEDINGS OF THE TURKISH PHYSICAL SOCIETY 32ND INTERNATIONAL PHYSICS CONGRESS (TPS32), SEP 06-09, Bodrum, TURKEY, 2017 ISSN 0094-243X

H10 V. Ciupina, E. Vasile, C, Porosnicu, G.Prodan, C. P. Lungu, **R. Vladoiu,** et al., *Characterization of nitrogen doped silicon-carbon multi-layer nanostructures obtained by TVA method* , Book Series: **Proceedings of SPIE** NANOSTRUCTURED THIN FILMS X, 2016, San Diego, CA, AUG 30-SEP 01, 2016, Volume: 9929, Article Number: UNSP 103560O, DOI: 10.1117/12.2237156, ISBN:978-1-62841-724-1, ISSN: 0277-786X

H11 V. Ciupina, C. P. Lungu, **R. Vladoiu,** G. Prodan, C, Antohe, S, Porosnicu, C, Stanescu, I, Jepu, I, Iftimie, S, Belc, M, Mandes, A, Dinca, V, Vasile, E, Zarovski, V, Nicolescu, V, Caraiane, A ,*Structural and electrical properties of N doped SiC nanostructures obtained by TVA method* **Book Series:** Proceedings of SPIE **NANOSTRUCTURED THIN FILMS VIII,** 2015, Volume: 9558, Article

Number: 955808, DOI: 10.1117/12.2187362, ISBN:978-1-62841-724-1, ISSN**:** 0277-786X

H12 V. Ciupina, C. P. Lungu, **R. Vladoiu** et al. *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*, **Conference:** Conference on Nanostructured Thin Films VII Location: San Diego, CA Date: AUG 20-21, 2014, NANOSTRUCTURED THIN FILMS VII Book Series:Proceedings of SPIE Volume: 9172 Article Number:91720Y, 2014 ISBN:978-1-62841-724-1, ISSN: 0277-786X

H13 V. Ciupina, C. P. Lungu, **R. Vladoiu**; et al., *SiC multi-layer protective coating on carbon obtained by thermionic vacuum arc method,* **Conference**: Conference on Nanostructured Thin Films VILocation: San Diego, CA Date: AUG 28-29, 2013 NANOSTRUCTURED THIN FILMS VI Book Series:Proceedings of SPIE Vol: 8818 Article Number: UNSP 881807 (2013) ISBN:978-1-62841-724-1, ISSN: 0277-786X

H14 V. Ciupina, C. P. Lungu, **R. Vladoiu,** T-D. Epure, G. Prodan, C. Porosnicu, M. Prodan, I. M. Stanescu, M. Contulov, A. Mandes, V. Dinca, V. Zarovschi, „*Application of carbon-aluminum nanostructures in divertors coatings from fusion reactor*", **PROCEEDINGS OF SPIE** - Nanostructured Thin Films V, Vol 8465, (2012), San Diego, California, United States ISBN:978-1-62841-724-1, ISSN: 0277-786X

H15 Ciupina, V.; Morjan, I.; Lungu, C. P.; **R. Vladoiu** et al *Electron MIcroscopy Characterization Of Some Carbon Based Nanostructures With Application In Divertors Coatings From Fusion Reactor,* **Conference**: Conference on Nanostructured Thin Films IVLocation: San Diego, CA Date: AUG 23-25, 2011 NANOSTRUCTURED THIN FILMS IV Book Series: **Proceedings of SPIE** Vol: 8104 Article Number: 810411 (2011) ISBN:978-1-62841-724-1, ISSN: 0277-786X

H16 Ciupina, V.; Morjan, I.; R. Alexandrescu, FV Dumitrache, G. Prodan, C. P. Lungu, **R. Vladoiu**; et al., *Synthesis and Characterization of some carbon based nanostructures*, **Conference**: NANOENGINEERING: FABRICATION, PROPERTIES, OPTICS, AND DEVICES VII, San Diego, CA, AUG 03-04, 2010 Book Series Proceedings of SPIE **Volume** 7764 **Article Number** 77640O

H17 Kuncser, V.; Schinteie, G.; Palade, P.; R. Vladoiu et al. *Spin configurations and interfacial diffusion in exchange bias and spin valve systems with Ir-Mn antiferromagnetic pinning layers* **Conference**: 7th International Symposium on the Industrial Applications of the Mossbauer Effect (ISIAME 2008) Budapest, HUNGARY 2008, ISIAME 2008 Pages: 465-471, 2009

H18 G. Musa, N. Ekem, T. Akan, S. Pat, M. Z Balbag, M. I. Cenik, V. Ciupina, **R. Vladoiu,** M. Tanisli, O. Ozen *Investigation of the carbon produced by methane pulsed discharge* Six International Conference of the Balkan Physical Union Book Series: **AIP CONFERENCE PROCEEDINGS** Volume: 899 Pages: 691-691 (2007)

H19 . G.Musa, Surdu-Bob, C, **R. Vladoiu,** N. Ekem, M. I. Cenik, S. Pat, M. Z Balbag, T. Akan, *Emission spectra of two interacting Plasmas* Vol: 899, P: 693-693 (2007) Six

International Conference of the Balkan Physical Union Book Series: **AIP CONFERENCE PROCEEDINGS**, Vol: 899, P: 692-692 (2007)

H20 Ekem, N.; Akan, T.; Pat, S.; R. Vladoiu et al *Investigation of properties of boron thin film deposited by thermionic vacuum arc technology*. Six International Conference of the Balkan Physical Union Book Series: **AIP CONFERENCE PROCEEDINGS** Volume: 899 Pages: 699-699 (2007)

I - LUCRĂRI PUBLICATE ÎN REVISTE ŞI VOLUME DE CONFERINŢE CU REFERENŢI (NEINDEXATE)

I1 V. Ciupina, **R. Vladoiu**, P. Popov, V. Dinca, M. Contulov, A. Mandes, C. P. Lungu, *Characterization of Nanostructured TiC Thin Films Synthesized by TVA (Thermionic Vacuum Arc) Method*, **JOURNAL OF MATERIALS SCIENCE ENGINEERING A** Vol. 2, No. 1, Jan. 2012, p 16-21

I2 A. Mandes, **R. Vladoiu,** M. Contulov "*Comparison view of carbon and tantalum pentoxide thin films characteristics deposited by Thermionic Vacuum Arc (TVA) technology at nanometric scale*" - - **NanotechItaly2012** Promoting responsible innovation, pp 244-245

I3 V. Dinca, **R. Vladoiu,** A. Mandes "*Thermionic Vacuum Arc Nanotechnology Used for SiC Thin Films Deposition*" - - **NanotechItaly2012** Promoting responsible innovation, pp 258-259

I4 M. Contulov, **R. Vladoiu,** V. Dinca, V. Bursikova - Mandes "*Mechanical characterization of hydrogenated DLC (a-C:H) films synthesized using Magnetically Gaseous Thermionic Vacuum Arc (MGTVA) Technology*" - - **NanotechItaly2012** Promoting responsible innovation, pp 278-279

I5 T. Akan, V. Ciupină, **R. Vlădoiu**, G. Musa,*"Surface charge influence on the breakdown voltage in He",* **Journal of Engineering and Natural Sciences**, vol 2, (2006) 45-49, Istanbul,ed Sigma, ISSN 1304-7191

I6 T. Akan, V. Ciupină, **R. Vlădoiu**, G. Musa,*Investigation of surface polarisation charges in He gas discharges,* **Journal of Science**, Afyon Kocatepe University, Vol. 7, number 1, p.81- 89, ISSN 1302-3187

I7 D. Mondescu, **R. Vlădoiu,** M. Ganciu, C.P. Lungu, I. Borcoman, E Finanţu, G. Musa, *"Barium titanate barrier discharge as mercury light emission source***", Romanian Reports in Physics, vol.** 49 3-4 (1997), ISSN 1221-1451

I8 **R. Vlădoiu**, S. Melike, G. Musa, *"Breakdown voltage value as a sensitive measure of the stored charges on the dielectric walls of the discharge devices",* **Romanian Reports in Physics**, Vol.5, no.1-5, (2002) 149-152, ISSN 1221-1451

I9 **R. Vlădoiu**, G. Chelan, M. Barligea, G. Musa *"Influence of the dielectric surfaces polarization on the breakdown voltages of gazeous discharge devices"*,– **Romanian Journal of Physics**, vol. 48, 1-4, (2003) 385-389, ISSN 1221-146X

I10 G. Musa, V. Ciupina, **R. Vlădoiu**, D. Coada, E. Florea, M Avram, I. Mustata *"Thermionic Vacuum Arc – A way for high tech thin film deposition"*, – Romanian **Journal of Physics** , vol. 48 (2003) , 25-27, ISSN 1221-146X

I11 G. Musa, I. Mustaţă, V. Ciupină, **R. Vlădoiu,** G. Prodan, E. Vasile, H. Ehrich,*„Carbon thin film deposition using thermionic vacuum arc",* **Romanian Journal of Physics,** vol. 49, no 5-6, (2004) 445-454, ISSN 1221-146X

I12 *",* J. D. Skalny, T. Mikoviny, **R. Vlădoiu** *„Negative corona discharges in pure CO_2 and/or N_2O gases and their mixtures with oxygen*, **Romanian Journal of Physics**, vol. 49, no 3-4 (2004) 321-331, ISSN 1221-146X

I13 R. Vlădoiu, V. Ciupină, G. Musa, *„Possible generation of negative ions at the collision of electronegative particle with negative charged glass wall",* **Romanian Journal of Physics,** vol. 50, no 9-10 (2005) 1103-1105, ISSN 1221-146X

I14 R. Vlădoiu, V. Ciupină, I. Mustaţă, C.P. Lungu, G. Musa, *Characterization of Carbon thin film deposited by Thermionic Vacuum Arc (TVA) method",* **Romanian Journal of Physics,** vol. 51, no 1-2 (2006) 197-200, ISSN 1221-146X

I15 V. Ciupina, **R**. **Vladoiu**, G. Prodan, I Mustata, G. Musa,*„Nanostructured carbon thin film deposition using Thermionic Vacuum Arc"*, **Analele Stiintifice ale Universitatii "Al. I. Cuza", Iasi**" , (2003), TOM XLIX –61, ISSN 1453-0759

I16 R. Vlădoiu, G. Musa *"Influence of the induced wall polarization on the breakdown voltage in He.",–* "**Ovidius University Annals of Physics**", Vol.1, Nr. 1, pag 63 , 2000

I17 R. Vlădoiu, G. Musa *"Thin films deposition using Thermionic Vacuum Arc technology",–* **"Ovidius University Annals of Physics**", Vol.2, 2001

I18 R Vladoiu, V. Ciupina ,G.Prodan, E Vasile, I. Mustata, M. Blideran, G. Musa , H. Ehrich *„Thermionic Vacuum Arc (TVA) deposition of nanostructured carbon thin films* - "**Ovidius University Annals of Physics**", Vol.3 , 2002

I19 G.Musa, I. Mustata, V. Ciupina, **R. Vladoiu**, G. Prodan, E. Vasile, C. P. Lungu*"Characterization of DLC (Diamond Like Carbon) thin films deposited by TVA (Thermionic Vacuum Arc) method"*, -"**Analele Universitatii din Vest din Timisoara**", seria Fizica, Vol. 44 (2003) 257-261

I20 M. Contulov, **R. Vladoiu,** A. Mandes, V. Ciupina, V. Bursikova, *"Surface Engineering of the Hydrogenated DLC (a-C:H) Coatings with Optimized Mechanical Performance"*, **Advanced Materials Research** Vols. 816-817 (2013) pp 33-37

I21 *A.* Mandes**, R.Vladoiu,** V. Dinca, G. Prodan, *"Growth and Characterization of the High Purity C-Mg Thin Films Obtained by Thermionic Vacuum Arc (TVA) Technology",* **Advanced Materials Research** Vols. 816-817 (2013) pp 106-110

I22 R. Vladoiu, A. Mandes, M. Contulov, V. Dinca, C. Porosnicu, *"Investigation of Composition-Properties' Relations on Silicon and Carbon Based Nanomaterials",* **Advanced Materials Research** Vols. 816-817 (2013) pp 232-236

I23 V. Dinca, **R. Vladoiu,** M. Contulov, M. Cernak, *"Surface Activation of the Polycarbonate in Atmospheric Pressure Plasma Generated in Air and Helium by Surface Dielectric Barrier Discharge (SDBD)",* **Advanced Materials Research** Vols. 816-817 (2013) pp 28-32

J– BREVETE ACORDATE ÎN ÎNTREAGA ACTIVITATE

J1. C P LUNGU, C C POROSNICU, I JEPU, C TICOS, M AUREL, V N ZAROSCHI, V TIRON, G POPA, **R VLADOIU**, V CIUPINA, Method for producing carbon-tungsten composite films with Thermionic Vacuum Arc, **Patent Number(s):** RO129461-A2 (OSIM)
J2 P CHIRU, V CIUPINA, I JEPU, A M LUNGU, P C LUNGU, C C POROSNICU, V TIRON, **R VLADOIU**, V N ZAROSCHI, Nanostructured Beryllium-carbon and beryllium-wolfram alloys and method for preparing the same, **Patent Number(s):** RO127300-A0 ; RO127300-A8 (OSIM)

K. Granturi/ proiecte de cercetare castigate prin competitive nationala

Director de Grant Academic ROSE pentru universități, AG 258/29.11.2019, 2019-2022, acronym ACCES, grant derulat prin Ministerul EDUCATIEI si finantat de Banca Mondială

Nr. crt.	Proiecte nationale	Cod/autoritate contractanta	Perioada	Valoarea (lei)	Functia
1	Obtinerea materialelor avansate prin implementarea unui nou concept al tehnologiei Plasma-Laser	**Proiect 70/2017 INOVATECH/UEFISCDI**	2017-2019	Titular unic UOC: 850.000	**Director de proiect**
2	"Nanocompozite complexe pe baza de carbon si titan pentru aplicatii industriale (CREATIF) "PCCA-tip 2, 160/2012 2. "" (2013-2015)	**Proiect 160/2012 CREATIF/UEFISCDI**	**2012-2016**	3 000 000 din care UOC 1 100 000	**Director de proiect**
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**	Titular unic UOC: 1 125 000	**Director de proiect**
4	Titlu; „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	Titular unic UOC 759 532.5	**Director de proiect**
5	Titlu: "Studiul comparativ al calitatii straturilor nanostructurate de carbon depuse prin metodele: arc termoionic in vid, arc catodic si	**Proiect 62/2006 CARBOCOMP /CERES -CEEX 2**	2006-2008	UOC: 575 000	**Director de proiect**

	pulverizare magnetron"				
6	Titlu: „Structuri de spin în magnetoelectronică"	**Proiect 35/10.2005 SPINCOMEL MATNANTECH-CEEX 2**	2005-2008	UOC 78 870	Responsabil proiect
7	Titlu: "Tehnologii avansate pentru dezvoltarea straturilor antifricţiune ecologice de tip metal-carbon"	**Proiect 237/2006 TEHMEH /RELANSIN- CEEX**	2006-2008	UOC 105.000	Responsabil proiect
8	Titlu: „Materiale feroelectrice micro şi nanostructurate pentru memorii nevolatile"	**Proiect93/2006MATFEROMEM/ MATNANTEH- CEEX**	2005-2008	UOC; 82.000	Responsabil de proiect
9	Titlu: "Cercetari avansate pentru producerea acoperirilor combinatoriale de interes pentru fuziune"	**Proiect CAPACIF 72-223 ANCS /2008**	2008-2011	UOC 42 794	Responsabil de proiect
10	Titlu: Titlu: Nanostructuri complexe generate în plasma: obtinere si caracterizare	**Proiect 108/2006 NANOSTRUPL/ MATNANTEH- CEEX**	2006-2008	UOC 105.000	Membru in echipa de cercetare

L Granturi/ proiecte de cercetare INTERNATIONALE ca RESPONSABIL DE PROIECT

L1 L'Agentie Universitaire de Francofonie **AUF-FRS Bulgarie/France/ Romania** "Modèles thermocinétiques pour la croissance de Graphène et de Nanotubes de carbone par dépôt chimique en phase vapeur assisté par plasma", 2017-2018,

L2 GRANT International HUMBOLDT V - Fokoop – RUM/1019528, 2004-2008

L3 Proiecte **internationale** nr. 47, 48/ IUCN Ordin No. 34/23.01.2015 DUBNA 2015

L4 Proiecte **internationale** nr 33, 83, 84/ IUCN Ordin no 96/15.02.2016 DUBNA 2016

L5 Proiecte **internationale** nr 49, 50/ IUCN Ordin no 220 din 10.04.2017 -DUBNA 2017

L6 Proiecte **internationale** nr 55, 56 / IUCN Ordin no 322/21.05.2018 - DUBNA 2018

L7 Proiect **international** nr 49/ IUCN Ordin no 397/27.05.2019 - DUBNA 2019

L8 Proiect **international** nr 45/ IUCN Ordinul nr. 269/20.05.2020- DUBNA 2020

12.02.2023

Semnătura,
Prof dr Rodica Vladoiu