

Justificare punctaj FIȘA DE AUTO-EVALUARE A PERFORMANTELOR

I. ACTIVITATE DE CERCETARE (80%)

I.1. Articole științifice publicate *in extenso* în reviste cotate *Web of Science*, *Clarivate Analytics* cu factor de impact: [(60 puncte x AIS) + 25 - pentru articole în calitate de autor principal sau autor corespndent; (60 puncte x AIS + 25) / număr autori - pentru articole în calitate de autor]

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| 1. Ioana-Laura Velicu, Vasile Tiron , Bogdan-George Rusu, Gheorghe Popa, "Copper thin films deposited under different power delivery modes and magnetron configurations: A comparative study", Surface & Coatings Technology 327 (2017) 192-199. |
| AIS = 0.517 Punctaj = 56.02 |
| 2. Alexandra Demeter, Florentina Samoila, Vasile Tiron , Dana Stanescu, Helene Magnan, Mihai Straticiu, Ion Burducea and Lucel Sirghi, "Visible-light photocatalytic activity of TiO_xN_y thin films obtained by reactive multi-pulse High Power Impulse Magnetron Sputtering", Surface & Coatings Technology 324 (2017) 614–619. |
| AIS = 0.517 Punctaj = 7.003 |
| 3. Vasile Tiron , Ioana-Laura Velicu, Dana Stanescu, Helene Magnan and Lucel Sirghi, "High Visible Light Photocatalytic Activity of Nitrogen-Doped ZnO Thin Films Deposited by HiPIMS", Surface & Coatings Technology 324 (2017) 594–600. |
| AIS = 0.517 Punctaj = 56.02 |
| 4. Ioana-Laura Velicu, Vasile Tiron , Corneliu Porosnicu, Ion Burducea, Nicoleta Lupu, George Stoian, Gheorghe Popa, Daniel Munteanu, "Enhanced properties of tungsten thin films deposited with a novel HiPIMS approach", Applied Surface Science 424 (2017) 397-406. |
| AIS = 0.627 Punctaj = 62.62 |
| 5. C. Tugui, A. Bele, V. Tiron , E. Hamciuc, C. D. Varganici and M. Cazacu, "Dielectric elastomers with voltage-switchable dual functionality built through chemical design", Journal of Materials Chemistry C 5 (2017) 824 – 834. |
| AIS = 1.133 Punctaj = 15.497 |
| 6. R. Mateus, A. Hakola, V. Tiron , C. Porosnicu, C.P. Lungu, E. Alves, "Study of deuterium retention in Be-W coatings with distinct roughness profiles", Fusion Engineering and Design 124 (2017) 464-467. |
| AIS = 0.281 Punctaj = 6.977 |
| 7. Vasile Tiron , Ioana–Laura Velicu, Corneliu Porosnicu, Ion Burducea, Paul Dinca, Petr Malinský, "Tungsten Nitride Coatings Obtained by HiPIMS as Plasma Facing Materials for Fusion Applications", Applied Surface Science 416 (2017) 878–884. |
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| 8. P. Dinca, C. Porosnicu, B. Butoi, I. Jepu, V. Tiron , O. G. Pompilian, I. Burducea, C. P. Lungu, I.-L. Velicu, "Beryllium-Tungsten Study on Mixed Layers obtained by m-HiPIMS / DCMS Techniques in a Deuterium and Nitrogen Reactive Gas Mixture", Surface & Coatings Technology 321 (2017) 397-402. |

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| AIS = 0.517 | Punctaj = 6.224 |
| 9. Alexandra Demeter, Vasile Tiron , Nicoleta Lupu, George Stoian and Lucel Sirghi, <i>"Plasma sputtering depositions with colloidal masks for fabrication of nanostructured surfaces with photocatalytic activity"</i> , Nanotechnology 28 (2017) 255302. | |
| AIS = 0.791 | Punctaj = 14.492 |
| 10. M. Rudolph, A. Demeter, E. Foy, V. Tiron , L. Sirghi, T. Minea, B. Bouchet-Fabre, M.-C. Hugon, <i>"Improving the crystallinity of Ta₃N₅ thin films by DC magnetron sputtering using an additional in-axis magnetic field on a balanced magnetron"</i> , Thin Solid Films 636 (2017) 48–53. | |
| IAIS = 0.356 | Punctaj = 5.795 |
| 11. C. Racles, M. Dascalu, A. Bele, V. Tiron , M. Asandulesa, C. Tugui, A. Vasiliu and M. Cazacu, <i>All-silicone elastic composites with counter-intuitive piezoelectric response, designed for electromechanical applications</i> , Journal of Materials Chemistry C 5 (2017) 6997 – 7010. | |
| AIS = 1.133 | Punctaj = 11.623 |
| 12. Jan Willem Coenen et al. <i>"Plasma-wall interaction studies within the EUROfusion Consortium: progress on plasmafacing components development and qualification"</i> , Nuclear Fusion 57(11) (2017) 116041. | |
| AIS = 0.836 | Punctaj = 0.447 |
| 13. M. Iacob, C. Tugui, V. Tiron , Vasile, A. Bele, V. Stelian, T. Vasiliu, M. Cazacu, A.-L. Vasiliu, C. Racles, <i>"Iron oxide nanoparticles as dielectric and piezoelectric enhancers for silicone elastomers"</i> , Smart Materials and Structures 26 (2017) 105046. | |
| AIS = 0.772 | Punctaj = 7.132 |
| 14. N. Becherescu, I. Mihailescu, V. Tiron , C. Luculescu, <i>"Preparation and characterization of ZnO thin films by PLD and HiPIMS"</i> , UPB Scientific Bulletin, Series A: Applied Mathematics and Physics, 79(2) (2017) 297-306 | |
| AIS = 0.094 | Punctaj = 7.66 |
| 15. N. Becherescu, I. Mihailescu, V. Tiron , C. Luculescu, <i>"Preparation and characterization of TiO₂ thin films by PLD and HiPIMS"</i> , UPB Scientific Bulletin, Series A: Applied Mathematics and Physics 79(3) (2017) 203-212. | |
| AIS = 0.094 | Punctaj = 7.66 |
| 16. Alexandra Demeter, Alexandra Besleaga, Vasile Tiron , Lucel Sirghi, <i>"Fabrication of 2D TiO₂ Nanopatterns by Plasma Colloidal Lithography"</i> , Recent Global Research and Education: Technological Challenges, Book Series: Advances in Intelligent Systems and Computing 519 (2017) 117 -122 | |
| 17. Vasile Tiron , Ioana-Laura Velicu, Daniel Cristea, Nicoleta Lupu, George Stoian, Daniel Munteanu, <i>"Influence of ion-to-neutral flux ratio on the mechanical and tribological properties of TiN coatings deposited by HiPIMS"</i> , Surface & Coatings Technology 352 (2018) 690-698. | |
| AIS = 0.511 | Punctaj = 55.66 |
| 18. A. DEMETER, V. TIRON , L. SIRGHI, <i>"TiO₂ 2D nanopatterns obtained by high power impulse magnetron sputtering depositions with colloidal masks"</i> , Romanian Reports in Physics 70 (4) (2018). | |
| AIS = 0.296 | Punctaj = 14.253 |
| 19. V Tiron , I-L Velicu, I Mihăilă and G Popa, <i>"Deposition rate enhancement in HiPIMS through the control of magnetic field and pulsing configuration"</i> Surface & Coatings Technology 337 (2018) 484– | |

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| AIS = 0.511 | Punctaj = 55.66 |
| 20. L. Leontie, · R. Danac, A. Carlescu C. Doroftei, · G. G. Rusu, · V. Tiron , S. Gurlui, O. Susu, „ <i>Electric and optical properties of some new functional lower-rim substituted calixarene derivatives in thin films</i> ”, Applied Physics A 124(355) (2018) 1-12. | |
| AIS = 0.308 | Punctaj = 5.435 |
| 21. Vasile TIRON , Ioana-Laura VELICU, Iulian PANA, Daniel CRISTEA, Bogdan George RUSU, Paul DINCA, Corneliu POROSNICU, Eduard GRIGORE, Daniel MUNTEANU, Sorin TASCU, “ <i>HiPIMS deposition of silicon nitride for solar cell application</i> ”, Surface & Coatings Technology 344 (2018) 197–203. | |
| AIS = 0.511 | Punctaj = 55.66 |
| 22. Dan Macovei, Vasile Tiron , Catalin Adomnitei, Dumitru Luca, Marius Dobromir, Stefan Antohe, Diana Mardare, „ <i>On the hydrophilicity of Ni-doped TiO₂ thin films. EXAFS studies</i> ”, Thin Solid Films 657 (2018) 42 - 49. | |
| AIS = 0.324 | Punctaj = 6.349 |
| 23. Vasile Tiron , Ioana-Laura Velicu, Andrei Nastuta, Claudiu Costin, Gheorghe Popa, Ziane Kechidi, Codrina Ionita, Roman Schrittwieser, “ <i>Enhanced extraction efficiency of the sputtered material from a magnetically assisted high power impulse hollow cathode</i> ”, Plasma Source Science and Technology 27 (2018) 085005. | |
| AIS = 0.804 | Punctaj = 73.24 |
| 24. Ioana-Laura VELICU, Gabriela-Theodora IANOȘ, Corneliu POROSNICU, Ilarion MIHĂILĂ, Ion BURDUCEA, Alin VELEA, Daniel CRISTEA, Daniel MUNTEANU, Vasile TIRON , „ <i>Energy-Enhanced Deposition of Copper Thin Films by Bipolar High Power Impulse Magnetron Sputtering</i> ”, Surface & Coatings Technology 259 (2019) 97–107. | |
| AIS = 0.542 | Punctaj = 56.44 |
| 25. P. Dinca, V. Tiron , I. Mihaila, I.-L. Velicu, C. Porosnicu, B. Butoi, A. Velea, E. Grigore, C. Costin, C.P. Lungu, “ <i>Negative ion-induced deuterium retention in mixed W-Al layers co-deposited in dual-HiPIMS</i> ”, Surface & Coatings Technology 363 (2019) 273-281. | |
| AIS = 0.542 | Punctaj = 5.752 |
| 26. Georgiana-Oana Turcan-Trofin, Mihai Asandulesa, Mihaela Balan-Porcarasu, Cristian-Dragos Varganici, Vasile Tiron , Carmen Racles, Maria Cazacu, „ <i>Linear and cyclic siloxanes sulfur-bridged functionalized with polar groups by thiol-ene addition: synthesis, characterization and exploring some material behaviour</i> ”, Journal of Molecular Liquids 282 (2019) 87-196. | |
| AIS = 0.62 | Punctaj = 7.775 |
| 27. V. Tiron , C. Porosnicu, P. Dinca, I.-L. Velicu, D. Cristea, D. Munteanu, Á. Révész, G. Stoian, C.P. Lungu. “ <i>Beryllium thin films deposited by thermionic vacuum arc for nuclear applications</i> ”, Applied Surface Science 481 (2019) 327 – 336. | |
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| 28. V. Tiron , E.-L. Ursu, D. Cristea, D. Munteanu, G. Bulai, A. Ceban, I.-L. Velicu, “ <i>Overcoming the insulating materials limitation in HiPIMS: ion-assisted deposition of DLC coatings using bipolar HiPIMS</i> ”, Applied Surface Science 494 (2019) 871–879. | |
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| 29. Georgiana-Oana Turcan-Trofin, Mirela-Fernanda Zaltariov, Mihail Iacob, Vasile Tiron , Florin | |

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| Branza, Carmen Racles, Maria Cazacu, "Copper complexes with spherical morphology generated in one step by amphiphilic ligands: in situ view of the self-assembling, characterization, catalytic activity", Colloids and Surfaces A: Physicochemical and Engineering Aspects 580 (2019) 123756. | |
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| 30. Codrin Tugui, Vasile Tiron , Mihaela Dascalu, Liviu Sacarescu, Maria Cazacu, „From an ultra-high molecular weight polydimethylsiloxane to the super-soft elastomer”, European Polymer Journal 120 (2019) 109243. | |
| AIS = 0.665 | Punctaj = 12.98 |
| 31. Alicia Rambu, Alin Apetrei, Florent Dautre, Hervé Tronche, Vasile Tiron , Marc Micheli, and Sorin Tascu „Lithium niobate waveguides with high-index contrast and preserved nonlinearity fabricated by High Vacuum Vapor-phase Proton Exchange”, Photonics Research 8 (2020) 8-16. | |
| AIS = 1.575 | Punctaj = 17.071 |
| 32. V. Tiron , I.-L. Velicu, "Understanding the ion acceleration mechanism in bipolar HiPIMS: the role of the double layer structure developed in the after-glow plasma", Plasma Sources Science and Technology 29 (2020) 015003. | |
| AIS = 0.726 | Punctaj = 68.56 |
| 33. F. Gheorghiu, R. Stanculescu, L. Curecheriu, E. Brunengo, P. Stagnaro, V. Tiron , P. Postolache, M. T. Buscaglia, L. Mitoseriu, "PVDF-ferrite composites with dual magneto-piezoelectric response for flexible electronics applications: synthesis and functional properties", Journal of Materials Science 55 (2020) 3926-3939 | |
| AIS = 0.595 | Punctaj = 6.744 |
| 34. Karolina Bujak, Ion Sava, Iuliana Stoica, Vasile Tiron , Ionut Topala, Rafał Węglowski, Ewa Schab-Balcerzak, Jolanta Konieczkowska "Photoinduced properties of "T-type" polyimides with azobenzene or azopyridine moieties", European Polymer Journal 126 (2020) 109563. | |
| AIS = 0.665 | Punctaj = 8.113 |
| 35. Sergiu Shova, Angelica Vlad, Madalin Damoc, Vasile Tiron , Mihaela Dascalu, Ghenadie Novitchi, Cristi Ursu, Maria Cazacu, "Nanoscale coordination polymer of dimanganese(II) as infinite, flexible nano-sheets with photo-switchable morphology", European Journal of Inorganic Chemistry (2020) 2043-2054. | |
| AIS = 0.447 | Punctaj = 6.478 |
| 36. Vasile Tiron , Ioana-Laura Velicu, Teodora Matei, Daniel Cristea, Luís Cunha, George Stoian, „Ultra-short pulse HiPIMS: a strategy to suppress arcing during reactive deposition of SiO ₂ thin films with enhanced mechanical and optical properties", Coatings 10 (2020) 633 | |
| AIS = 0.406 | Punctaj = 49.36 |
| 37. Carmen Racles, Cristian Ursu, Mihaela Dascalu, Mihai Asandulesa, Vasile Tiron , Adrian Bele, Codrin Tugui, Sabina Teodoroff-Onesim, „Multi-stimuli responsive free-standing films of DR1- grafted silicones", Chemical Engineering Journal, 401 (2020) 126087 | |
| AIS = 1.669 | Punctaj = 15.643 |
| 38. Sergiu Shova, Vasile Tiron , Angelica Vlad, Ghenadie Novitchi, Dan Dumitrescu, Madalin Damoc, Mirela-Fernanda Zaltariov, Maria Cazacu, "Permethylated dinuclear Mn(III) coordination nanostructure with stripe-ordered magnetic domains", Applied Organometallic Chemistry, e5957 (2020) 1-11. | |
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| <p>39. Ioana Laura Velicu, Vasile Tiron, Mihai Andrei Petrea and Gheorghe Popa, <i>New concept of metal ion thruster based on pulsed thermionic vacuum arc discharge</i>, Plasma Sources Science and Technology 30 (2021) 015006.</p> <p>AIS = 0.726</p> | Punctaj = 68.56 |
| <p>40. Carmen Racles, Mihai Asandulesa, Vasile Tiron, Codrin Tugui, Nicoleta Vornicu, Bianca-Iulia Ciubotaru, Matej Mičušík, Mária Omastová, Ana-Lavinia Vasiliu, Cristina Ciomaga, „Elastic Composites with PDMS matrix and Polysulfone-Supported Silver Nanoparticles as Filler”, Polymer 217 (2021) 123480.</p> <p>AIS = 0.626</p> | Punctaj = 6.256 |
| <p>41. B. Tiss, M. Benfraj, N. Bouguila, M. Kraini, S. Alaya, D. Cristea, C. Croitoru, V. Craciun, D. Craciun, P. Prepelita, I.-L. Velicu, V. Tiron, C. Moura, L. Cunha, „The effect of vacuum and air annealing in the physical characteristics and photocatalytic efficiency of In₂S₃:Ag thin films produced by spray pyrolysis”, Materials Chemistry and Physics, 270 (2021) 124838.</p> <p>AIS = 0.515</p> | Punctaj = 3.993 |
| <p>42. Alexandru-Constantin Stoica, Madalin Damoc, Vasile Tiron, Mihaela Dascalu, Adina Coroaba, Sergiu Shova, Maria Cazacu, „Silanol-functionalized tetranuclear copper complex and its nanoscale-heterogenization by immobilization on glass surface from solution, Journal of Molecular Liquids”, 344 (2021) 117742.</p> <p>AIS = 0.705</p> | Punctaj = 9.614 |
| <p>43. V. Tiron, G. Bulai, C. Costin, I.-L. Velicu, P. Dincă, D. Iancu and I. Burducea, “Growth and characterization of W thin films with controlled Ne and Ar contents deposited by bipolar HiPIMS”, Nuclear Materials and Energy 29 (2021) 101091.</p> <p>AIS = 0.800</p> | Punctaj = 73 |
| <p>44. Alicia Petronela Rambu, Vasile Tiron, Eugen Oniciuc, Sorin Tascu, “Spontaneous polarization reversal induced by proton exchange in Z-cut lithium niobate α-phase channel waveguides”, Materials 14 (2021) 7127.</p> <p>AIS = 0.597</p> | Punctaj = 15.205 |
| <p>45. V. Tiron, M.A. Ciolan, G. Bulai, D. Cristea and I.-L. Velicu, “Effect of pulsing configuration and magnetic balance degree on mechanical properties of CrN coatings deposited by bipolar HiPIMS onto floating substrate”, Coatings, 11 (2021).</p> <p>AIS = 0.406</p> | Punctaj = 49.36 |
| I.1 = 1 230.92puncte | |

I.3. Contracte de cercetare științifică obținute prin competiție și derulate în ultimii 5 ani prin Universitate

Membru în echipa proiectului tip: PNCDI III, Program 5 / Subprogram 5.2 / Modul 5.2.1 EURATOM-RO Fuziune

Titlul proiectului: Participarea României la EUROfusion WPPFC și cercetări complementare - Principal și Complementar

Număr proiect: 1EU-1/2 / 01.07.2016, Acronim: PFC-RO

Director: Conf. Dr. Claudiu Costin

Valoare (2021-2021): 1 026 830 lei

I.3 = 6.89 puncte

I.6. Citări și recenzii ale creației de autor în ultimii 5 ani în reviste de specialitate indexate Web of Science, Clarivate Analytics: (10+ 20 x AIS) / număr autori

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| <p>1. V. Tiron, S. Dobrea, C. Costin and G. Popa, “On the carbon and tungsten sputtering rate in a magnetron discharge”, Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms 267(2) (2009) 434-437.</p> <p>[1] Alan Xu, David E.J. Armstrong, Christian Beck, Michael P. Moody, George D.W. Smith, Paul A.J. Bagot, Steve G. Roberts, Ion-irradiation induced clustering in W-Re-Ta, W-Re and W-Ta alloys: An atom probe tomography and nanoindentation study, Acta Materialia, 124 (2017) 71-78 https://doi.org/10.1016/j.actamat.2016.10.050. AIS=1.637 (10.685)</p> <p>[2] M. Makówka, W. Pawlak, P. Konarski, B. Wendler, H. Szymanowski, Modification of magnetron sputter deposition of nc-WC/a-C(:H) coatings with an additional RF discharge, Diamond and Related Materials, 98 (2019) 107509 doi.org/10.1016/j.diamond.2019.107509. AIS=0.443 (4.715)</p> |
| <p>2. C. Costin, V. Tiron, J. Faustin, and G. Popa, “Fast Imaging Investigation on Pulsed Magnetron Discharge”, IEEE Transactions on Plasma Science, 39(11) (2011) 2482 – 2483.</p> <p>[1] I.-L. VELICU, I. MIHAILA, G. POPA, Operating the hipims discharge with ultra-short pulses: a solution to overcome the deposition rate limitation, Romanian Reports in Physics 69, 411 (2017) AIS=0.225 (3.625)</p> <p>[2] Adrien Revel, Tiberiu Minea and Claudiu Costin, 2D PIC-MCC simulations of magnetron plasma in HiPIMS regime with external circuit, Plasma Sources Science and Technology 27 (2018) AIS=0.804 (6.57)</p> |
| <p>3. Vasile Tiron, Marius Dobromir, Valentin Pohoata and Gheorghe Popa, “Ion energy distribution in thermionic vacuum arc”, IEEE Transaction on Plasma Science 39(6) (2011) 1403-1407.</p> <p>[1] Vladoiu, R.; Tichý, M.; Mandes, A.; Dinca, V.; Kudrna, P. Thermionic Vacuum Arc—A Versatile Technology for Thin Film Deposition and Its Applications. <i>Coatings</i> 2020, <i>10</i>, 211. https://doi.org/10.3390/coatings10030211. AIS=0.406 (4.53)</p> |
| <p>4. V. Tiron, L. Mihaescu, C.P. Lungu, G. Popa, “Strong double layer structure in thermionic vacuum arc”, Romanian Journal of Physics 56 (2011) 41–46.</p> <p>[1] Vladoiu, R.; Tichý, M.; Mandes, A.; Dinca, V.; Kudrna, P. Thermionic Vacuum Arc—A Versatile Technology for Thin Film Deposition and Its Applications. <i>Coatings</i> 2020, <i>10</i>, 211. https://doi.org/10.3390/coatings10030211. AIS=0.406 (4.53)</p> |
| <p>5. Catalin Vitelaru, Valentin Pohoata, Constantin Aniculaesei, Vasile Tiron and Gheorghe Popa, “The break-down of hyperfine structure coupling induced by the Zeeman effect on aluminum $^2S_{1/2} - ^2P_{1/2}$ transition, measured by tunable diode-laser induced fluorescence”, Journal of Applied Physics 109 (2011) 084911.</p> <p>[1] S. S. Harilal, N. L. LaHaye, and M. C. Phillips, High-resolution spectroscopy of laser ablation plumes using laser-induced fluorescence, Optics Express Vol. 25, Issue 3, pp. 2312-2326 (2017) •https://doi.org/10.1364/OE.25.002312 AIS=0.872 (5.488)</p> <p>[2] A. Revel, A. El Farsy, L.de Poucques, J. Robert and T. M. Minea, Transition from ballistic to thermalized transport of the metal sputtered species in DC magnetron, Plasma Sources Science and Technology (2021) AIS=0.726 (4.904)</p> |
| <p>6. Ioana-Laura Velicu, Maria Neagu, Horia Chiriac, Vasile Tiron and Marius Dobromir, “Structural and Magnetic Properties of FeCuNbSiB Thin Films Deposited by HiPIMS”, IEEE Transactions on Magnetics.</p> |

4(48) (2012) 1336 – 1339.

[1] M. Kateb, H. Hajihoseini, J. Tomas Gudmundsson, S. Ingvarsson, Comparison of magnetic and structural properties of permalloy Ni80Fe20 grown by dc and high power impulse magnetron sputtering, Journal of Physics D: Applied Physics 51 (2018) 285005, DOI: 10.1088/1361-6463/aaca11. AIS=0.701 (4.804)

7. V. Tiron, L. Sirghi, G. Popa, „Control of aluminum doping of ZnO:Al thin films obtained by high-power impulse magnetron sputtering”, Thin Solid Films 520 4305–4309 (2012).

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[2] Mariana Osiac, The Electrical and Structural Properties of Nitrogen Ge1Sb2Te4 Thin Film, Coatings 8(4)0(2018) 117 <https://doi.org/10.3390/coatings8040117> AIS=0.369 (5.793)

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8. A.P. Rambu. V. Tiron, V. Nica, N. Iftimie, “Functional properties of ZnO films prepared by thermal oxidation of metallic films”, Journal of Applied Physics 113 (2013) 234506.

[1] Laura Valenzuela, Ana Iglesias, Marisol Faraldos, Ana Bahamonde, Roberto Rosal, Antimicrobial surfaces with self-cleaning properties functionalized by photocatalytic ZnO electrosprayed coatings, Journal of Hazardous Materials 369 (2019) 665-673 <https://doi.org/10.1016/j.jhazmat.2019.02.073>. AIS=1.365 (9.325)

10. Ioana-Laura Velicu, Maciej Kowalczyk, Maria Neagu, **Vasile Tiron**, Horia Chiriac, Jaroslaw Ferec, “FINEMET-type thin films deposited by HiPIMS: Influence of growth and annealing conditions on the magnetic behaviour”, Materials Science and Engineering B 178 (2013) 1329 – 1333.

[1] H. A. Shivaee, F. Celegato, P. Tiberto, A. Castellero, M. Baricco, H. R. M. Hosseini, The effects of thickness on magnetic properties of FeCuNbSiB sputtered thin films, Scientia Iranica 24 (2017) 3521-3525, DOI: 10.24200/sci.2017.4429. AIS=0.207 (2.357)

[2] M. Kateb, H. Hajihoseini, J. T. Gudmundsson, S. Ingvarsson, Comparison of magnetic and structural properties of permalloy Ni80Fe20 grown by dc and high power impulse magnetron sputtering, Journal of Physics D: Applied Physics 51 (2018) 285005, DOI: 10.1088/1361-6463/aaca11. AIS=0.701 (4.003)

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11. S. Dobrea, I. Mihaila, **V. Tiron**, G. Popa, “Optical and mass spectrometry diagnosis of a CO₂ microwave plasma discharge”, Romanian Reports in Physics 66(41) (2014) 1147-1154.

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[1]Alina Soroceanu * and George T. Stiubianu, Siloxane Matrix Molecular Weight Influences the Properties of Nanocomposites Based on Metal Complexes and Dielectric Elastomer, Materials 2021, 14(12), 3352; AIS=0.597 (2.743)

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61. Carmen Racles, Mihai Asandulesa, **Vasile Tiron**, Codrin Tugui, Nicoleta Vornicu, Bianca-Iulia Ciubotaru, Matej Mičušík, Mária Omastová, Ana-Lavinia Vasiliu, Cristina Ciomaga, „Elastic Composites with PDMS matrix and Polysulfone-Supported Silver Nanoparticles as Filler”, Polymer 217 (2021) 123480.

[1] M. Senthilkumar, R. Pandimurugan, S. Palanisamy & S. Mohandoss (2021) Facile synthesis of metal nanoparticle-loaded polymer nanocomposite with highly efficient an optically enhanced biocidal and anticancer agents, Journal of Biomaterials Science, Polymer Edition, 32:17, 2210-2226, AIS=0.426 (1.852)

[2] Vlad Cozma, Antibacterial Polysiloxane Polymers and Coatings for Cochlear Implants, Molecules 2021, 26(16), 4892; AIS=0.694 (2.388)

62. I.-L. Velicu, M. Neagu, **V. Tiron**, Fe_{73.5}Cu₁Nb₃Si_{15.5}B₇ "Thin Films Deposited by HiPIMS: Magnetic and Magnetostrictive Behaviour", Journal of Superconductivity and Novel Magnetism 28 (2015) 1035.

[1] Xiao Zuo, Peiling Ke, Rende Chen, Xiaowei Li, Magnus Odén, and Aiyang Wang, "Discharge state transition and cathode fall thickness evolution during chromium HiPIMS discharge", Physics of Plasmas 24, 083507 (2017) AIS=0.469 (6.46)

I.3 = 1 618.21 puncte

I.7. Participare la conferințe științifice în calitate de invited speaker

V. Tiron, "Plasma characteristics in the near-floating substrate region in bipolar HiPIMS: Effect of pulsing configuration and magnetic balance degree", Invited lecture at HiPIMS Today - Online Conference, 20-22 January 2021 (<https://www.hipims.today>).

I.7 = 25 puncte

I.12. Editor, membru în echipa editorială la reviste indexate *Web of Science*, *Clarivate Analytics*:

Membru în echipa editorială: 15 puncte/activitate

Guest Editor la jurnalul **Coatings**, Special Issue "*Recent Progress and Developments in Pulsed Magnetron Sputtering for Advanced Coatings*".

(link:

https://www.mdpi.com/journal/coatings/special_issues/magnetron_sputtering_coatings#published)

I.12 = 15 puncte

I.13. Referent, la reviste indexate *Web of Science*, *Clarivate Analytics*:

Referent la IOP și Elsevier (0.1 puncte/activitate).

I.13 = 0.2 puncte

Punctaj total I = 2896.22

II ACTIVITATE INSTITUȚIONALĂ (20%)

I.1. Activități de promovare UAIC; Caravana UAIC, participare târguri, expoziții, evenimente instituționale (5 puncte/activitate).

Participare la XXIII^d International Exhibition of Inventions, **INVENTICA 2019**.

Cererea de brevet "*Installation and process for energetic metal ion beam with application in space propulsion*", autori **V. Tiron**, I.-L. Velicu, G. Popa, a fost premiată cu **Medalia de Aur** și **Diploma de Onoare**.

I.1 = 5 puncte

I.2. Organizare manifestări științifice (conferințe, congrese, colocvii) și școli de vară, demonstrabile cu link la pagina web.

Membru în comitetul de organizare al coferințelor (5 puncte/activitate):

1. XVIIIth International Conference on Plasma Physics and Application - CPPA 2019, 20-22 iunie 2019, Iasi, Romania,
(link:<https://www.plasma.uaic.ro/cppa2019/index.php/overview/local-organizing-committee/>)
2. 16th International Conference on Global Research and Education, Inter-Academia 2017, September 25-28, 2017, Iasi, Romania.

I.2 = 10 puncte

I.6. Membru în comisii concurs în vederea ocupării unui post didactic ori de cercetare în învățământul universitar (5 puncte/comisie)

Membru în comisiile de concurs pentru ocuparea posturilor de Asistent Cercetare (poziția 11) și Cercetător Științific (poziția 9) la ICI, Centrul RAMTECH, Asistent cercetare (poziția 16) la Centrul CERESIM, Cercetător Științific (poziția 3) la proiectul de cercetare SUSTENVPRO, comisii aprobate de către Senatul UAIC prin decizia nr. 1435 d din 11.12.2020.

Membru în comisiile de concurs pentru ocuparea posturilor de Cercetător Științific la Facultatea de Biologie, Proiect de cercetare SUSTENVPRO, decizia nr. 880 d din 20.07.2018, și Asistent Cercetare la Centrul Ramtech-ICI, Proiect de Cercetare COPY-QuP, decizia nr. 500 d din 06.04. 2021.

I.6 = 30 puncte

I.7. Membru în comisii de doctorat (admitere, îndrumare, susținere publică)

țară:2 puncte pentru fiecare activitate

Membru în 6 comisii de îndrumare doctorat:

1. drd. Demeter Slexandra
2. drd. Samola Florentina
3. drd. Dascălu Adina
4. drd. Beșleagă Alexandra
5. drd. Teodoroff-Onesim Sabina
6. drd. Țifui Gabriela

I.7 = 12 puncte

Punctaj total II = 57