

**Author: Lect. Dr. Eng. Daniel CRISTEA**

**Habilitation thesis title: Multifunctional thin solid films**

**Domain: Materials Engineering**

## PUBLICATIONS LIST

### RELEVANT PAPERS

1. **D.Cristea, D.Constantin, A.Crisan, C.S.Abreu, J.R.Gomes, N.P.Barradas, E.Alves, C.Moura, F.Vaz, L.Cunha. Properties of tantalum oxynitride thin films produced by magnetron sputtering: The influence of processing parameters** revista: **Vacuum** issn: 0042207X An Aparitie: 2013 Autori: 10 Autor Principal WOS:000322805900013 FI = 2,06  
<https://www.sciencedirect.com/science/article/pii/S0042207X13000973>
2. **D Cristea, A Crisan, NP Barradas, E Alves, C Moura, F Vaz, L Cunha. Development of tantalum oxynitride thin films produced by PVD: Study of structural stability** revista: **Applied Surface Science** issn:01694332 An Aparitie: 2013 Autori:7 Autor Principal WOS:000325960900004 FI = 4,43  
<https://www.sciencedirect.com/science/article/pii/S0169433213011720>
3. **D Cristea, A Crisan, D Munteanu, M Apreutesei, MF Costa, L Cunha. Tantalum oxynitride thin films: Mechanical properties and wear behavior dependence on growth conditions** revista: **Surface and Coatings Technology** issn: 02578972 An Aparitie: 2014 Autori: 6 Autor Principal WOS:000346895000071 FI = 2,90  
<https://www.sciencedirect.com/science/article/pii/S0257897214007415>
4. **D Cristea, A Crisan, N Cretu, J Borges, C Lopes, L Cunha, V Ion, M Dinescu, NP Barradas, E Alves, M Apreutesei, D Munteanu. Structure dependent resistivity and dielectric characteristics of tantalum oxynitride thin films produced by magnetron sputtering** revista: **Applied Surface Science** issn: 01694332 An Aparitie: 2015 Autori: 12 Autor Principal WOS:000363673500009 FI = 4,43  
<https://www.sciencedirect.com/science/article/pii/S0169433215015159>
5. **D Cristea, M Pătru, A Crisan, D Munteanu, D Crăciun, NP Barradas, E Alves, M Apreutesei, C Moura, L Cunha. Composition and structure variation for magnetron sputtered tantalum oxynitride thin films, as function of deposition parameters** revista: **Applied Surface Science** issn: 01694332 An Aparitie: 2015 Autori: 10 Autor Principal WOS:000366220500002 FI = 4,43 <https://www.sciencedirect.com/science/article/pii/S0169433215021133>
6. **Ioana Ghiuță, Daniel Cristea\*, Cătălin Croitoru, Joseph Kost, Rodica Wenkert, Ioannis Vyrides, Andreas Anayiotos, Daniel Munteanu. Characterization and antimicrobial activity of silver nanoparticles, biosynthesized using Bacillus species** revista: **Applied Surface Science** issn:01694332 An Aparitie: 2018 Autori: 8 Autor Principal WOS:000425731200009 FI = 4,43  
<https://www.sciencedirect.com/science/article/pii/S0169433217328118>
7. **L Cunha, M Apreutesei, C Moura, E Alves, NP Barradas, D Cristea\*. In-situ XRD vs ex-situ vacuum annealing of tantalum oxynitride thin films: Assessments on the structural evolution** revista: **Applied Surface Science** issn: 01694332 An Aparitie: 2018 Autori: 6 Autor Principal

WOS:000425731200003 FI = 4,43

<https://www.sciencedirect.com/science/article/pii/S0169433217331963>

8. **Daniel Cristea**, Luis Cunha, Camelia Gabor, Ioana Ghiuta, Catalin Croitoru, Alexandru Marin, Laura Velicu, Alexandra Besleaga, Vasile Bogdan. **Tantalum Oxynitride Thin Films: Assessment of the Photocatalytic Efficiency and Antimicrobial Capacity** revista: **Nanomaterials** issn: 20794991 An Aparitie: 2019 Autori: 9 **Autor Principal** WOS:000464450100003 FI = 3,50 <https://www.mdpi.com/2079-4991/9/3/476>
9. Guangyu Yan, Yuhou Wu, **Daniel Cristea**, Lusheng Liu, Mircea Tierean, Yibao Wang, Feng Lu, He Wang, Ziyao Yuan, Daniel Munteanu, Dehong Zhao. **Mechanical properties and wear behavior of multi-layer diamond films deposited by hot-filament chemical vapor deposition** revista: **Applied Surface Science** issn: 01694332 An Aparitie: 2019 Autori: 11 WOS:000487838900046 FI = 5,15 <https://www.sciencedirect.com/science/article/pii/S0169433219321464>
10. V Tiron, E-L Ursu, **D Cristea**, D Munteanu, G Bulai, A Ceban, I-L Velicu. **Overcoming the insulating materials limitation in HiPIMS: Ion-assisted T deposition of DLC coatings using bipolar HiPIMS** revista: **Applied Surface Science** issn: 01694332 An Aparitie: 2019 Autori: 7 WOS:000487838900098 FI = 5,15 <https://www.sciencedirect.com/science/article/pii/S0169433219322755>

---

## PhD THESIS

**Research on the synthesis and characterization of MeOxNy system thin films deposited by reactive magnetron sputtering**

---

## PATENTS

-

---

## BOOKS / BOOK CHAPTERS

1. I Ghiuță, **D Cristea**. *Silver nanoparticles for delivery purposes*, in Nanoengineered Biomaterials for Advanced Drug Delivery 1st Edition Elsevier isbn:9780081029855 2020 25 Pages (Chapter)
  2. **Daniel Cristea**, Luis Cunha, Aurel Crișan, Daniel Munteanu. *Oxynitride thin solid films*, Transilvania University Publishing, isbn: 978-606-19-0450-1 2014, 201 Pages
  3. Ioana Ghiuță, **Daniel Cristea**, Daniel Munteanu. *Metallic nanoparticles synthesis* Transilvania
-

- University Publishing, isbn: 978-606-19-1011-3, 2018, 183 Pages
4. Camelia Gabor, **Daniel Cristea**, Mariana Axente. *Isostatic compaction of thin layers obtained by thermal spraying*, PRINTECH, isbn: 978-606-23-0988-6, 2019, 319 Pages
  5. **Daniel Cristea**. *Advanced materials for renewable energies*, Printech, isbn: 978-606-23-1156-8, 2020, 204 Pages,
  6. **Daniel Cristea**. *Nanomaterials*, Printech, isbn: 978-606-23-1144-5, 2020, 254 Pages
- 

## JOURNAL ARTICLES

### a. ISI-WOS

1. **D Cristea**, D Constantin, A Crisan, CS Abreu, JR Gomes, NP Barradas, E Alves, C Moura, F Vaz, L Cunha. *Properties of tantalum oxynitride thin films produced by magnetron sputtering: The influence of processing parameters* revista: Vacuum issn: 0042207X An Aparitie: 2013 Autori: 10 Autor Principal WOS:000322805900013 **FI = 2.06**  
<https://www.sciencedirect.com/science/article/pii/S0042207X13000973>
  2. **D Cristea**, A Crisan, NP Barradas, E Alves, C Moura, F Vaz, L Cunha. *Development of tantalum oxynitride thin films produced by PVD: Study of structural stability* revista: Applied Surface Science issn:01694332 An Aparitie: 2013 Autori:7 Autor Principal WOS:000325960900004 **FI = 4.43** <https://www.sciencedirect.com/science/article/pii/S0169433213011720>
  3. Konstantinos Kapnisis, Georgios Constantinides, Harry Georgiou, **Daniel Cristea**, Camelia Gabor, Daniel Munteanu, Brigitta Brott, Peter Anderson, Jack Lemons, Andreas Anayiotos. *Multi-scale mechanical investigation of stainless steel and cobalt–chromium stents* revista: Journal of the mechanical behavior of biomedical materials issn:17516161 An Aparitie: 2014 Autori:10 WOS:000345468700024 **FI = 3.41**  
<https://www.sciencedirect.com/science/article/pii/S175161611400294X>
  4. **Daniel Cristea**, Aurel Crisan, Nuno Barradas, Eduardo Alves, Pedro Costa, Senentxu Lanceros-Méndez, Luis Cunha. *Electrical And Photocatalytic Behaviour Of TaON Magnetron Sputtered Thin Solid Films* revista: Metalurgia International issn:15822214 An Aparitie: 2013 Autori: 7 Autor Principal WOS:000315835600013 **FI = 0.13**
  5. **D Cristea**, A Crisan, Daniel Munteanu, M Apreutesei, MF Costa, L Cunha. *Tantalum oxynitride thin films: Mechanical properties and wear behavior dependence on growth conditions* revista: Surface and Coatings Technology issn: 02578972 An Aparitie: 2014 Autori: 6 Autor Principal WOS:000346895000071 **FI = 2.90**  
<https://www.sciencedirect.com/science/article/pii/S0257897214007415>
  6. G Popescu-Pelin, D Craciun, G Socol, **D Cristea**, L Floroian, M Badea, M Socol, V Craciun. *Investigations of pulsed laser deposited TiN thin films for titanium implants* revista: Romanian Reports in Physics issn: 12211451 An Aparitie: 2015 Autori: 8 WOS:000367274400029 **FI = 1.58** [http://194.102.58.21/2015\\_67\\_4/A28.pdf](http://194.102.58.21/2015_67_4/A28.pdf)
  7. V Jinga, AO Mateescu, G Mateescu, LS Craciun, C Ionescu, C Samoila, D Ursutiu, D Munteanu, **D Cristea**. *Mechanical and tribological behaviour of the multilayer dry lubricant coatings with ternary composition from compound materials (TixNy; TiB2/TixByNz; WC/WxCyNz)* revista:
-

- Journal Of Optoelectronics And Advanced Materials issn:14544164 An Aparitie: 2015 Autori: 9  
**FI = 0.39** WOS:000357766600040
8. D Craciun, G Socol, **D Cristea**, M Stoicanescu, Nikolett Oláh, K Balazs, N Stefan, E Lambers, V Craciun. *Mechanical properties of pulsed laser deposited nanocrystalline SiC* revista: Applied Surface Science issn: 01694332 An Aparitie: 2015 Autori: 9 WOS:000351617600066  
**FI = 4.43** <https://www.sciencedirect.com/science/article/pii/S0169433214029201>
  9. AO Mateescu, G Mateescu, V Jinga, **D Cristea**, C Samoilă, D Ursutiu, D Munteanu. *Physical and technological interpretation of mechanical properties for single and multi-layer films with properties of dry lubricants* revista: Journal Of Optoelectronics And Advanced Materials issn:14544164 An Aparitie: 2015 Autori: 7 WOS:000359967600039 **FI = 0.39**
  10. Ioan Dragos Utu, Gabriela Marginean, Iosif Hulka, Viorel-Aurel Serban, **Dan Cristea**. *Properties of the thermally sprayed Al<sub>2</sub>O<sub>3</sub>-TiO<sub>2</sub> coatings deposited on titanium substrate* revista: International Journal of Refractory Metals and Hard Materials issn: 02634368 An Aparitie: 2015 Autori: 5 WOS:000356744300016 **FI = 2.60**  
<https://www.sciencedirect.com/science/article/pii/S0263436815000591>
  11. **D Cristea**, A Crisan, N Cretu, J Borges, C Lopes, L Cunha, V Ion, M Dinescu, NP Barradas, E Alves, M Apreutesei, D Munteanu. *Structure dependent resistivity and dielectric characteristics of tantalum oxynitride thin films produced by magnetron sputtering* revista: Applied Surface Science issn: 01694332 An Aparitie: 2015 Autori: 12 Autor Principal WOS:000363673500009 **FI = 4.43**  
<https://www.sciencedirect.com/science/article/pii/S0169433215015159>
  12. M Pătru, L Isac, L Cunha, P Martins, S Lanceros-Mendez, G Oncioiu, **D Cristea**, D Munteanu. *Structural, mechanical and piezoelectric properties of polycrystalline AlN films sputtered on titanium bottom electrodes* revista: Applied Surface Science issn: 01694332 An Aparitie: 2015 Autori: 8 WOS:000363673500006 **FI = 4.43**  
<https://www.sciencedirect.com/science/article/pii/S0169433215015871>
  13. V Jinga, AO Mateescu, **D Cristea**, G Mateescu, I Burducea, C Ionescu, LS Crăciun, I Ghiuță, C Samoilă, D Ursutiu, D Munteanu. *Compositional, morphological and mechanical investigations of monolayer type coatings obtained by standard and reactive magnetron sputtering from Ti, TiB<sub>2</sub> and WC* revista: Applied Surface Science issn: 01694332 An Aparitie: 2015 Autori: 11 WOS:000366220500011 **FI = 4.43**  
<https://www.sciencedirect.com/science/article/pii/S0169433215019339>
  14. **D Cristea**, M Pătru, A Crisan, Daniela Munteanu, D Crăciun, NP Barradas, E Alves, M Apreutesei, C Moura, L Cunha. *Composition and structure variation for magnetron sputtered tantalum oxynitride thin films, as function of deposition parameters* revista: Applied Surface Science issn: 01694332 An Aparitie: 2015 Autori: 10 Autor Principal WOS:000366220500002  
**FI = 4.43** <https://www.sciencedirect.com/science/article/pii/S0169433215021133>
  15. Valentin Craciun, **Daniel Cristea**, Gabriel Socol, Eric Lambers, Roxana Trusca, Steven Fairchild, Tyson Back, Gregory Gruen, Doina Craciun. *Characteristics of LaB<sub>6</sub> thin films grown by pulsed laser deposition* revista: Journal of Vacuum Science & Technology A issn: 07342101 An Aparitie: 2016 Autori: 9 WOS:000384263700025 **FI = 1.76**  
<https://avs.scitation.org/doi/abs/10.1116/1.4960647>

16. M Pătru, C Gabor, **D Cristea**, G Oncioiu, D Munteanu. *Mechanical and wear characteristics of aC: H/Cr/AlN/Ti multilayer films deposited by PVD/PACVD* revista: Surface & Coatings Technology issn: 02578972 An Aparitie: 2017 Autori: 5 WOS:000402215000048 FI = 2.90 <https://www.sciencedirect.com/science/article/pii/S0257897216314062>
17. Camelia Popescu, **Daniel Cristea**, Bogdan Bită, Rodica Cristescu, Doina Craciun, Georgiana Diana Chioibas, Catalin Luculescu, Irina Paun, Liviu Duta, Andrei C Popescu. *An Experimental Study on Nano-Carbon Films as an Anti-Wear Protection for Drilling Tools* revista: Coatings issn:20796412 An Aparitie: 2017 Autori: 10 WOS:000419197100021 FI = 2.35 <https://www.mdpi.com/2079-6412/7/12/228>
18. Ioan Milosan, **Daniel Cristea**, Ionelia Voiculescu, Mihai Alin Pop, Marianne Balat-Pichelin, Andra Mihaela Predescu, Cristina Aurica Bogatu, Tibor Bedo, Andrei-Constantin Berbecaru, Victor Geantă, Camelia Gabor, Luminita Anisoara Isac, Flavius Aurelian Sarbu, Gheorghe Oancea. *Characterisation of EN 1.4136 stainless steel heat-treated in solar furnace* revista: The International Journal of Advanced Manufacturing Technology issn:02683768 An Aparitie: 2018 Autori: 14 WOS:000463669500060 FI = 2.60 <https://link.springer.com/article/10.1007/s00170-018-3153-9>
19. Ioana Ghiuță, **Daniel Cristea**, Catalin Croitoru, Joseph Kost, Rodica Wenkert, Ioannis Vyrides, Andreas Anayiotos, Daniel Munteanu. *Characterization and antimicrobial activity of silver nanoparticles, biosynthesized using Bacillus species* revista: Applied Surface Science issn:01694332 An Aparitie: 2018 Autori: 8 Autor Principal WOS:000425731200009 FI = 4.43 <https://www.sciencedirect.com/science/article/pii/S0169433217328118>
20. Catalin Croitoru, Cosmin Spirchez, Aurel Lunguleasa, **Daniel Cristea**, Ionut Claudiu Roata, Mihai Alin Pop, Tibor Bedo, Elena Manuela Stanciu, Alexandru Pascu. *Surface properties of thermally treated composite wood panels* revista: Applied Surface Science issn: 01694332 An Aparitie: 2018 Autori: 9 WOS:000425731200013 FI = 4.43 <https://www.sciencedirect.com/science/article/pii/S0169433217325692>
21. L Cunha, M Apreutesei, C Moura, E Alves, NP Barradas, **D Cristea**. *In-situ XRD vs ex-situ vacuum annealing of tantalum oxynitride thin films: Assessments on the structural evolution* revista: Applied Surface Science issn: 01694332 An Aparitie: 2018 Autori: 6 Autor Principal WOS:000425731200003 FI = 4.43 <https://www.sciencedirect.com/science/article/pii/S0169433217331963>
22. Ioan Milosan, Gilles Flamant, Ionelia Voiculescu, Victor Geanta, Daniel Munteanu, Tibor Bedo, Mihai Alin Pop, Augustin Semenescu, Aurel Crisan, **Daniel Cristea**, Ioan Giacomelli, Maria Stoicanescu, Camelia Gabor, Flavius Aurelian Sarbu, Ioana Ghiuta. *Comparative study of heat treatment effects performed with solar energy and electric furnace on en 1.4848 stainless steel alloyed with Co, W, Cu and Mo*, revista: Revista de Chimie (Bucharest) issn: 25375733 An Aparitie: 2018 Autori: 15 WOS:000434954100004 FI = 1.41 <https://www.revistadechimie.ro/pdf/4%20MILOSAN%205%2018.pdf>
23. Catalin Croitoru, Cosmin Spirchez, **Daniel Cristea**, Aurel Lunguleasa, Mihai Alin Pop, Tibor Bedo, Ionut Claudiu Roata, Mihai Alexandru Luca. *Calcium carbonate and wood reinforced hybrid PVC composites* revista: Journal of Applied Polymer Science issn: 00218995 An Aparitie: 2018 Autori: 8 WOS:000426508700017 FI = 1.90

- <https://onlinelibrary.wiley.com/doi/abs/10.1002/app.46317>
24. Vasile Tiron, Ioana-Laura Velicu, Iulian Pana, **Daniel Cristea**, Bogdan George Rusu, Paul Dinca, Corneliu Porosnicu, Eduard Grigore, Daniel Munteanu, Sorin Tascu. *HiPIMS deposition of silicon nitride for solar cell application* revista: Surface & Coatings Technology issn: 02578972 An Aparitie: 2018 Autori: 10 WOS:000437391300023 **FI = 2.90**  
<https://www.sciencedirect.com/science/article/pii/S0257897218302767>
25. EL Tiron, A Crisan, T Bedó, M Stoicanescu, MA Pop, **D Cristea**. *The Influence of Galvanizing Parameters on the Structural Development of Zn-Al-Based Coatings* revista: Journal of Materials Engineering and Performance issn: 10599495 An Aparitie: 2018 Autori: 6 WOS:000443966400018 **FI = 1.34** <https://link.springer.com/article/10.1007/s11665-018-3555-8>
26. Vasile Tiron, Ioana-Laura Velicu, **Daniel Cristea**, Nicoleta Lupu, George Stoian, Daniel Munteanu. *Influence of ion-to-neutral flux ratio on the mechanical and tribological properties of TiN coatings deposited by HiPIMS* revista: Surface & Coatings Technology issn: 02578972 An Aparitie: 2018 Autori: 6 WOS:000447106400071 **FI = 2.90**  
<https://www.sciencedirect.com/science/article/pii/S0257897217311945>
27. D Feldiorean, **D Cristea**, M Tiorean, C Croitoru, C Gabor, L Jakab-Farkas, L Cunha, NP Barradas, E Alves, V Craciun, A Marin, C Moura, J Leme, M Socol, D Craciun, M Cosnita, D Munteanu. *Deposition temperature influence on the wear behaviour of carbon-based coatings deposited on hardened steel* revista: Applied Surface Science issn:01694332 An Aparitie: 2019 Autori: 17 WOS:000458482100090 **FI = 4.43**  
<https://www.sciencedirect.com/science/article/pii/S016943321930042X>
28. Ioana-Laura Velicu, Gabriela-Theodora Ianoş, Corneliu Porosnicu, Ilarion Mihăilă, Ion Burducea, Alin Velea, **Daniel Cristea**, Daniel Munteanu, Vasile Tiron. *Energy-enhanced deposition of copper thin films by bipolar high power impulse magnetron sputtering* revista: Surface & Coatings Technology issn: 02578972 An Aparitie: 2019 Autori: 9 WOS:000457662700012 **FI = 2.90**  
<https://www.sciencedirect.com/science/article/pii/S025789721831404X>
29. Guangyu Yan, Yuhou Wu, **Daniel Cristea**, Feng Lu, Yibao Wang, Dehong Zhao, Mircea Tiorean, Lusheng Liu. *Machining performance of hard-brittle materials by multi-layer micro-nano crystalline diamond coated tools* revista: Results in Physics issn: 22113797 An Aparitie: 2019 Autori: 8 WOS:000476618700191 **FI = 2.14**  
<https://www.sciencedirect.com/science/article/pii/S2211379719307417>
30. Camelia Gabor, **Daniel Cristea**, Ioana-Laura Velicu, Tibor Bedo, Andrea Gatto, Elena Bassoli, Bela Varga, Mihai Alin Pop, Victor Geanta, Radu Stefanoiu, Mirela Maria Codescu, Eugen Manta, Delia Patroi, Monica Florescu, Sorin Ion Munteanu, Ioana Ghiuta, Nicoleta Lupu, Daniel Munteanu. *Ti-Zr-Si-Nb Nanocrystalline Alloys and Metallic Glasses: Assessment on the Structure, Thermal Stability, Corrosion and Mechanical Properties* revista: Materials issn:19961944 An Aparitie: 2019 Autori: 18 WOS:000469757500192 **FI = 2.46**  
<https://www.mdpi.com/1996-1944/12/9/1551>
31. Tibor Bedo, Bela Varga, **Daniel Cristea**, Alexandra Nitoi, Andrea Gatto, Elena Bassoli, Georgiana Bulai, Ioana-Laura Velicu, Ioana Ghiuta, Sorin Munteanu, Mihai Alin Pop, Camelia

- Gabor, Mihaela Cosnita, Luminita Parv, Daniel Munteanu. *Metastable Al–Si–Ni Alloys for Additive Manufacturing: Structural Stability and Energy Release during Heating* revista: Metals issn: 20754701 An Aparitie: 2019 Autori:15 WOS:000478818700002 **FI = 1.70**  
<https://www.mdpi.com/2075-4701/9/5/483>
32. Vasile Tiron, Corneliu Porosnicu, Paul Dinca, Ioana-Laura Velicu, **Daniel Cristea**, Daniel Munteanu, Ádám Révész, George Stoian, Cristian P Lungu. *Beryllium thin films deposited by thermionic vacuum arc for nuclear applications* revista: Applied Surface Science issn:01694332 An Aparitie: 2019 Autori: 9 WOS:000472176900040 **FI = 4.43**  
<https://www.sciencedirect.com/science/article/pii/S0169433219307160>
33. **Daniel Cristea**, Luis Cunha, Camelia Gabor, Ioana Ghiuta, Catalin Croitoru, Alexandru Marin, Laura Velicu, Alexandra Besleaga, Bogdan Vasile. *Tantalum Oxynitride Thin Films: Assessment of the Photocatalytic Efficiency and Antimicrobial Capacity* revista: Nanomaterials issn: 20794991 An Aparitie: 2019 Autori: 9 Autor Principal WOS:000464450100003 **FI = 3.50** <https://www.mdpi.com/2079-4991/9/3/476>
34. V Tiron, E-L Ursu, **D Cristea**, D Munteanu, G Bulai, A Ceban, I-L Velicu. *Overcoming the insulating materials limitation in HiPIMS: Ion-assisted T deposition of DLC coatings using bipolar HiPIMS* revista: Applied Surface Science issn: 01694332 An Aparitie: 2019 Autori: 7 WOS:000487838900098 **FI = 5.15**  
<https://www.sciencedirect.com/science/article/pii/S0169433219322755>
35. Guangyu Yan, Yuhou Wu, **Daniel Cristea**, Lusheng Liu, Mircea Tiorean, Yibao Wang, Feng Lu, He Wang, Ziyao Yuan, Daniel Munteanu, Dehong Zhao. *Mechanical properties and wear behavior of multi-layer diamond films deposited by hot-filament chemical vapor deposition* revista: Applied Surface Science issn: 01694332 An Aparitie: 2019 Autori: 11 WOS:000487838900046 **FI = 5.15**  
<https://www.sciencedirect.com/science/article/pii/S0169433219321464>
36. C Lopes, C Gabor, **D Cristea**, R Costa, RP Domingues, MS Rodrigues, J Borges, E Alves, NP Barradas, D Munteanu, F Vaz. *Evolution of the mechanical properties of Ti-based intermetallic thin films doped with different metals to be used as biomedical devices* revista: Applied Surface Science issn: 01694332 An Aparitie: 2020 Autori: 11 WOS:000510846500142 **FI = 5.15**  
<https://www.sciencedirect.com/science/article/pii/S0169433219334336>
37. Ioan Milosan, Monica Florescu, **Daniel Cristea**, Ionelia Voiculescu, Mihai Alin Pop, Inmaculada Cañadas, José Rodriguez, Cristina Aurica Bogatu, Tibor Bedo. *Evaluation of heat-treated AISI 316 stainless steel in solar furnaces to be used as possible implant material* revista: Materials issn:19961944 An Aparitie: 2020 Autori: 9 WOS:000515503100088 **FI = 2.97**  
<https://www.mdpi.com/1996-1944/13/3/581>
38. Zhe Yuan, Tingting Peng, Dong An, Daniel Cristea, Mihai Alin Pop. *Rolling bearing fault diagnosis based on adaptive smooth ITD and MF-DFA method* revista: Journal of Low Frequency Noise, Vibration and Active Control issn: 20484046 An Aparitie: 2019 Autori: 5 WOS:000480051500001 **FI = 1.70**  
<https://journals.sagepub.com/doi/full/10.1177/1461348419867012>
39. Vasile Tiron, Ioana-Laura Velicu, Teodora Matei, Daniel Cristea, Luis Cunha, George Stoian.

- Ultra-Short Pulse HiPIMS: A Strategy to Suppress Arcing during Reactive Deposition of SiO<sub>2</sub> Thin Films with Enhanced Mechanical and Optical Properties revista: Coatings issn: 20796412 An Aparitie: 2020 Autori: 6 WOS:000554213600001 **FI = 2.43**  
<https://www.mdpi.com/2079-6412/10/7/633>
40. George E Stan, Teddy Tite, Adrian-Claudiu Popa, Iuliana Maria Chirica, Catalin C Negrița, Cristina Besleaga, Irina Zgura, Any Cristina Sergentu, Gianina Popescu-Pelin, **Daniel Cristea**, Lucia E Ionescu, Marius Neculescu, Hugo R Fernandes, José MF Ferreira. *The Beneficial Mechanical and Biological Outcomes of Thin Copper-Gallium Doped Silica-Rich Bio-Active Glass Implant-Type Coatings*. revista: Coatings issn: 20796412 An Aparitie: 2020 Autori: 14  
<https://www.mdpi.com/2079-6412/10/11/1119> **FI = 2.43**

**b. BDI**

1. I Ghiuta, **D Cristea**, D Tînt, D Munteanu. *Surface modification of metallic biomaterials used as medical implants and prostheses* revista: Bulletin of the Transilvania University of Brasov. Engineering Sciences. Series I BDI: ProQuest issn:2065-2119 An Aparitie: 2015 Autori: 4  
<http://webbut.unitbv.ro/BU2015/Series%20I/BULETIN%20I/Ghiuta%20I.pdf>
2. **D Cristea**, I Ghiuta, D Munteanu. *Tantalum Based Materials For Implants And Prostheses Applications* revista: Bulletin of the Transilvania University of Brasov. Engineering Sciences. Series I BDI: ProQuest issn: 2065-2119 An Aparitie: 2015 Autori: 3  
<http://webbut.unitbv.ro/BU2015/Series%20I/BULETIN%20I/Cristea%20D.pdf>
3. **Daniel Cristea**, Aurel Crișan. *Tantalum Based Thin Films Preparation, Structures and Properties* revista: RECENT BDI: Index Copernicus Journal Master List, ULRICHSWEB Global Serials Directory issn: 1582-0246 An Aparitie: 2013 Autori: 2  
<https://www.recentonline.ro/038/Cristea-R38.pdf>
4. **Daniel Cristea**, Cristian Ionescu, Alexandru Munteanu, Daniel Munteanu. *The Corrosion Characterization Of Ti-Si-C Thin Films Obtained By Magnetron Sputtering Deposition* revista: RECENT BDI: Index Copernicus Journal Master List, ULRICHSWEB Global Serials Directory issn:1582-0246 An Aparitie: 2009 Autori: 4  
[https://www.recentonline.ro/027/CRISTEA\\_Daniel.pdf](https://www.recentonline.ro/027/CRISTEA_Daniel.pdf)
5. Vlad Jinga, **Daniel Cristea**, AO Mateescu, Cornel Samoila, Doru Ursuțiu, G Mateescu, Daniel Munteanu. *Dry Lubricant Materials Deposited by Magnetron Sputtering and Friction Coefficients Evaluation* revista: Key Engineering Materials 660:75-80 August 2015 BDI: Scopus issn: 978-3-03835-559-5 An Aparitie: 2015 Autori: 7  
<https://www.scientific.net/KEM.660.75>
6. **D Cristea**, Luís Cunha, A Crișan, D Munteanu. *Overview On Magnetron Sputtered Tantalum Oxynitride Thin Films – Structures And Properties* revista: Tehnomus BDI: Ulrichsweb issn:1224-029X An Aparitie: 2015 Autori: 4
7. Ioana Ghiuta, Andrea Gatto, Elena Bassoli, Sorin Ion Munteanu, Tibor Bedo, Mihai Alin Pop, Camelia Gabor, Maria Covei, Mihaela Cosnita, **Daniel Cristea**, Béla Varga, Daniel Munteanu. *The Influence of Powder Particle and Grain Size on Parts Manufacturing by Powder Bed Fusion* revista: Materials Science Forum BDI: Scopus issn: 1662-9752 An Aparitie: 2018 Autori: 12 <https://www.scientific.net/MSF.941.1585>



8. C Gabor, **D Cristea**, D Munteanu, T Bedo, MA Pop, SI Munteanu, I Miloşan. *The influence of induction hardening process parameters on the properties of 50CrMo4 steel* revista: Bulletin of the Transilvania University of Brasov, Series I: Engineering Sciences BDI: EBSCO issn: 2065-2119 An Aparitie: 2017 Autori: 7
  9. I Ghiuță, **D Cristea**, D Munteanu. *Synthesis Methods Of Metallic Nanoparticles-An Overview* revista: Bulletin of the Transilvania University of Brasov. Engineering Sciences. Series I BDI: EBSCO issn: 2065-2119 An Aparitie: 2017 Autori: 3
  10. DI Feldiorean, **D Cristea**, L Jakab-Farkas, MH Tierean. *Surface Characterization of DLC Layers PVD Coated on AISI 52100 Steel Substrate* revista: IOP Conference Series: Materials Science and Engineering: 7th International Conference on Advanced Materials and Structures - AMS 2018 28–31 March 2018, Romania BDI: IOP Science An Aparitie: 2018 Autori: 4
  11. T Bedő, SI Munteanu, T Peng, MA Pop, C Gabor, **D Cristea**, D Munteanu. *The Influence of the Build Orientation on the Tensile Strength and the Hardness of the Polyamide Parts Made by Selective Laser Sintering Technology* revista: Bulletin of the Transilvania University of Brasov. Engineering Sciences. Series I BDI: EBSCO issn: 2065-2119 An Aparitie: 2018 Autori: 7
  12. Patru, M., **Cristea, D.**, Ghiuta, I., Munteanu, D. *The Effect Of AlN/Ti Interlayers On The Mechanical And Tribological Behaviour Of DLC Coatings* revista: European Conference on Heat Treatment 2015 and 22nd Heat Treatment and Surface Engineering from Tradition to Innovation Congress, IFHTSE 2015; Venice; Italy; May 2015; BDI: Scopus issn: 978-889899003-0 An Aparitie: 2015 Autori: 4
  13. A Nitoi, **D Cristea**, MA Pop, T Bedo, B Varga, D Munteanu. *Aluminum based metastable alloys for additive manufacturing* revista: IOP Conference Series: Materials Science and Engineering 682 BDI: Scopus issn: 1757-899X An Aparitie: 2019 Autori: 6
  14. **Daniel Cristea**, MA Pop, C Faraian, D Munteanu. *The influence of additive manufacturing parameters on the structural and mechanical properties of acrylonitrile butadiene styrene (ABS) parts produced by fused filament fabrication* revista: IOP Conference Series: Materials Science and Engineering 682 BDI: Scopus issn: 1757-899X An Aparitie: 2019 Autori: 4
- 

## PAPERS IN INTERNATIONAL CONFERENCES

### ISI Proceedings

1. Konstantinos Kapnisis, Costas Pitsillides, Marianna Prokopi, G. Constantinides, **Daniel Cristea**, Daniel Munteanu, Brigitta Brott, Peter Anderson, Jack Lemons, Andreas Anayiotos. *Metallic Stents: Biomechanical Analysis and In Vivo Investigation of the Vessel Inflammatory Response* revista: XIV Mediterranean Conference On Medical And Biological Engineering And Computing 2016 Book Series: IFMBE Proceedings conferinta: XIV Mediterranean Conference On Medical And Biological Engineering And Computing 2016 issn:16800737 An Aparitie: 2016 Autori: 10 WOS:000376283000212
  2. D Craciun, AC Popescu, **D Cristea**, M Stoicanescu, I Milos, E Lambers, G Socol, V Craciun. *Hard TiC Films Grown by Pulsed Laser Deposition* revista: Materials Today-Proceedings conferinta: 10th International Conference on Physics of Advanced Materials (ICPAM) issn: 22147853 An
-

- 
- Aparitie: 2015 Autori: 8 WOS:000363467900002
3. Vlad Jinga, **Daniel Cristea**, Cornel Samoilă, D Ursutiu, AO Mateescu, G Mateescu, D Munteanu. *Tribological properties of ternary nanolayers, obtained from simple/compound materials* revista: IOP Publishing IOP Conf. Series: Materials Science and Engineering 133 (2016) conferinta: International Conference on Innovative Research 2016 - ICIR Euroinvent 2016 issn:17578981 An Aparitie: 2016 Autori: 7 WOS:000391140000002
  4. Ioana Ghiuță, **Daniel Cristea**, Rodica Wenkert, Daniel Munteanu. *Green synthesis of silver chloride nanoparticles using Rhodotorula Mucilaginosa* revista: Powder Metallurgy and Advanced Materials conferinta: 5th International Conference on Powder Metallurgy & Advanced Materials, RoPM&AM 2017, issn: 24743941 An Aparitie: 2018 Autori: 4 WOS:000452925200004
  5. Daniel Munteanu, Tibor Bedo, Mihai Alin Pop, Ioan Milosan, Camelia Gabor, Ioana Ghiuta, Sorin Munteanu, **Dan Cristea**. *Influential parameters on the inductive quenching technology for large bearing rings* revista: Metal 2018 conferinta: Metal 2018 issn: 12345678 An Aparitie: 2018 Autori: 8 WOS:000461832200124
- 

#### OTHER PAPERS / RELEVANT ACHIEVEMENTS

-

---

Date

05.01.2021

Author  
signature