



Daniel Cristea

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Nationality: Romanian

WORK EXPERIENCE

Transilvania University, Faculty of Materials Science and Engineering
City: Brasov | **Country:** Romania
[2023 - Current] **Professor**

Transilvania University, Faculty of Materials Science and Engineering
City: Brasov | **Country:** Romania
[2022 - 2023] **Associate Professor**

Transilvania University, Faculty of Materials Science and Engineering
City: Brasov | **Country:** Romania
[2015 - 2022] **Lecturer**

Transilvania University, Faculty of Materials Science and Engineering
[2012 - 2015] **Associate Teaching Staff**

SC Organe de Asamblare SA
City: Brasov | **Country:** Romania
[2009 - 2010] **Mechanical technician, mechanical engineer**

EDUCATION & TRAINING

[04/2014 - 11/2015] **Postdoctoral researcher**
Transilvania University, Faculty of Materials Science and Engineering
Project title: *Tantalum oxynitride multifunctional thin films applications*
Main topics: Thin films synthesis and characterization. Practical applications

[02/2012 - 08/2012] **Research internship**
Minho University, Department of Physics

[2010 - 2013] **PhD student**
Transilvania University, Faculty of Materials Science and Engineering

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

Main topics: Thin films synthesis. Thin films characterization

[2009 - 2011] **Master's degree**

Transilvania University, Faculty of Materials Science and Engineering

[2001 - 2009] **Materials Science Engineer**

Transilvania University, Faculty of Materials Science and Engineering

Main topics: Materials science, materials engineering

LANGUAGE SKILLS

Mother tongue(s): Romanian

Other language(s):

English

LISTENING: C1 READING: C1 WRITING: C1

SPOKEN PRODUCTION: C1 SPOKEN INTERACTION: C1

JOB-RELATED SKILLS

Job-related skills

Thin film research and development, mainly by Physical Vapor Deposition (sputtering, PLD, etc.), surface characterization (nanoindentation, wear and tribology, adherence of thin films to substrates, corrosion resistance, biocompatibility, photocatalysis, electrical, and optical analysis.

SCIENTIFIC ACHIEVEMENTS

Scientific papers

- 5 books at national level, 1 book chapter at international level (Elsevier)
- ISI-WOS (Clarivate) indexed papers: 72, of which 15 as lead author (FI > 1)
- BDI indexed works: 13
- habilitation in the field of Materials Engineering (2021)
- 980 citations in ISI journals, over 500 non-ISI citations
- Hirsch indexes: Clarivate: 17, SCOPUS: 18, Google Scholar: 21
- Research IDs:
 - Clarivate: Q-7554-2019,
 - Scopus: 44860915600,
 - Google Scholar: eRawl_wAAAAJ,
 - ORCID: 0000-0002-3871-1436
- Reviewer for over 50 Clarivate-indexed journals

RESEARCH PROJECTS

Contracts (as PI)

1. SFERA III: Concentrated solar radiation fast sintering of novel metastable Al-Si-Ni alloys, as potential raw materials for additive manufacturing (European Commission nr. ctr: 823802 2019)
2. SFERA III: Novel Ti-based biocompatible alloy coatings from powders sintered onto Ti6Al4V substrates using concentrated solar radiation (European Commission nr. ctr: 823802 2020)
3. DAAD Grant: Corrosion resistant Me-Mg nitrides (Host: Research Institute for Precious Metals and Metal Chemistry (fem Forschungsinstitut Edelmetalle + Metallchemie) Schwäbisch Gmünd, Germania)

German Academic Exchange Service nr. ctr.: 57442043 2020

4. Magnetron sputtered Me-Me binary oxynitride multifunctional thin solid films. 431898 RON, UEFISCDI nr.ctr: TE 59 31/08/2020 (PN-IIIP1-1.1-TE-2019-1209) 2020-2022

5. Hardness Test, Scratch Test, Pin/Ball on Disk Tribometer Test. 72000 RON IFIN-HH nr.ctr: 13440 16/11/2020 2020-2021

6. Young Researchers Grant (Transilvania University of Brasov) 8022/2017 – “Wear resistant thin solid films”.

Member of other 9 national and international research projects.

TRAINEESHIP OR RESEARCH EXCHANGE PROGRAMS

Traineeship or research exchange programs

2017 - Instrumented indentation at Queen Mary University of London, United Kingdom;

2019 - Simulated concentrated solar energy experiments at Middle Eastern Technical University, Ankara, Turkey, 2019;

2019 - Sputtering deposition chamber maintenance and repair at Minho University, Physics Department, Portugal;

2019 - Additive manufacturing summer school at University of Modena and Reggio Emilia, Italy;

2020 - Dual magnetron sputtering and corrosion analysis at the Research Institute for Precious Metals and Metal Chemistry, Germany;

2020 - Concentrated solar energy experiments at PROMES-CNRS, Odeillo, France;

2024 - Digital microscopy course, Hirox Europe headquarters, Berlin, Germany.

COMMUNICATION AND INTERPERSONAL SKILLS

Communication and interpersonal skills

- communication abilities, individual and team work

a. Clarivate-indexed (with IF):

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 Year 2013 Authors: 10 Main author WOS: 000322805900013 **FI = 2.06** **Main author** [link](#)
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 Year 2013 Authors: 7 **Main author** WOS: 000325960900004 **FI = 4.43** **Main author** [link](#)
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 Year 2014 Authors: 10 WOS: 000345468700024 **FI = 3.41** [link](#)
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 Year 2013 Authors: 7 Main author WOS: 000315835600013 **FI = 0.13** **Main author** [link](#)
5. **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 Year 2014 Authors: 6 Main author WOS: 000346895000071 **FI = 2.90** **Main author** [link](#)
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 Year 2015 Authors: 8 WOS: 000367274400029 **FI = 1.58** [link](#)
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 Year 2015 Authors: 9 WOS: 000357766600040 **FI = 0.39** [link](#)
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 films* revista: **Applied Surface Science** issn: 01694332 Year 2015 Authors: 9 WOS: 000351617600066 **FI = 4.43** [link](#)

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 Year 2015 Authors: 7 WOS: 000359967600039 **FI = 0.39** [link](#)
10. Ioan Dragos Utu, Gabriela Marginean, Iosif Hulka, Viorel-Aurel Serban, **Dan Cristea**. *Properties of the thermally sprayed Al₂O₃-TiO₂ coatings deposited on titanium substrate* revista: **International Journal of Refractory Metals and Hard Materials** issn: 02634368 Year 2015 Authors: 5 WOS: 000356744300016 **FI = 2.60** [link](#)
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 Year 2015 Authors: 12 Main author WOS: 000363673500009 **FI = 4.43** **Main author** [link](#)
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 Year 2015 Authors: 8 WOS: 000363673500006 **FI = 4.43** [link](#)
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, TiB₂ and WC* revista: **Applied Surface Science** issn: 01694332 Year 2015 Authors: 11 WOS: 000366220500011 **FI = 4.43** [link](#)
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 Year 2015 Authors: 10 Main author WOS: 000366220500002 **FI = 4.43** **Main author** [link](#)
15. Valentin Craciun, **Daniel Cristea**, Gabriel Socol, Eric Lambers, Roxana Trusca, Steven Fairchild, Tyson Back, Gregory Gruen, Doina Craciun. *Characteristics of LaB₆ thin films grown by pulsed laser deposition* revista: **Journal of Vacuum Science & Technology A** issn: 07342101 Year 2016 Authors: 9 WOS: 000384263700025 **FI = 1.76** [link](#)
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 Year 2017 Authors: 5 WOS: 000402215000048 **FI = 2.90** [link](#)

17. Camelia Popescu, **Daniel Cristea**, Bogdan Bită, Rodica Cristescu, Doina Craciun, Georgiana Diana Chioibasu, 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 Year 2017 Authors: 10 WOS: 000419197100021 **FI = 2.35** [link](#)
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 Year 2018 Authors: 14 WOS: 000463669500060 **FI = 2.60** [link](#)
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 Year 2018 Authors: 8 WOS: 000425731200009 **FI = 4.43** **Main author** [link](#)
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 Year 2018 Authors: 9 WOS: 000425731200013 **FI = 4.43** [link](#)
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 Year 2018 Authors: 6 Main author WOS: 000425731200003 **FI = 4.43** **Main author** [link](#)
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 Year 2018 Authors: 15 WOS: 000434954100004 **FI = 1.41** [link](#)
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 Year 2018 Authors: 8 WOS: 000426508700017 **FI = 1.90** [link](#)
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 Year 2018 Authors: 10 WOS: 000437391300023 **FI = 2.90** [link](#)
25. EL Tiron, A Crisan, T Bedő, 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 Year 2018 Authors: 6 WOS: 000443966400018 **FI = 1.34** [link](#)
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 Year 2018 Authors: 6 WOS: 000447106400071 **FI = 2.90** [link](#)
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 Year 2019 Authors: 17 WOS: 000458482100090 **FI = 4.43** [link](#)
28. Ioana-Laura Velicu, Gabriela-Theodora Ianoș, 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 Year 2019 Authors: 9 WOS: 000457662700012 **FI = 2.90** [link](#)
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 Year 2019 Authors: 8 WOS:000476618700191 **FI = 2.14** [link](#)
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 Year 2019 Authors: 18 WOS: 000469757500192 **FI = 2.46** [link](#)
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 Year 2019 Authors:15 WOS: 000478818700002 **FI = 1.70** [link](#)

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 Year 2019 Authors: 9 WOS: 000472176900040 **FI = 4.43** [link](#)
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 Year 2019 Authors: 9 Main author WOS: 000464450100003 **Main author FI = 3.50** [link](#)
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 Year 2019 Authors: 7 WOS: 000487838900098 **FI = 5.15** [link](#)
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 Year 2019 Authors: 11 WOS: 000487838900046 **FI = 5.15** [link](#)
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 Year 2020 Authors: 11 WOS: 000510846500142 **FI = 5.15** [link](#)
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 Year 2020 Authors: 9 WOS: 000515503100088 **FI = 2.97** [link](#)
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 Year 2019 Authors: 5 WOS: 000480051500001 **FI = 1.70** [link](#)
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 SiO₂ Thin Films with Enhanced Mechanical and Optical Properties* revista: **Coatings** issn: 20796412 Year 2020 Authors: 6 WOS: 000554213600001 **FI = 2.43** [link](#)
40. George E Stan, Teddy Tite, Adrian-Claudiu Popa, Iuliana Maria Chirica, Catalin C Negri, 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 Year 2020 Authors: 14 WOS:000592733100001 **FI = 2.43** [link](#)

41. Alice O Mateescu, Gheorghe Mateescu, Adriana Balan, Catalin Ceaus, Ioan Stamatin, **Daniel Cristea**, Cornel Samoila, Doru Ursutiu *Stainless Steel Surface Nitriding in Open Atmosphere Cold Plasma: Improved Mechanical, Corrosion and Wear Resistance Properties* revista: **Materials** 14 (17), 4836, issn: 1996-1944 An: 2021 Authors: 8 WOS: 000694404900001 **FI = 3.69** [link](#)
42. Belgacem Tiss, Youssef Moualhi, Nouredine Bouguila, Mabrouk Kraini, Sahbi Alaya, Catalin Croitoru, Ioana Ghiuta, **Daniel Cristea**, Delia Patroi, Cacilda Moura, Luís Cunha *Influence of the Physical Properties on the Antibacterial and Photocatalytic Behavior of Ag-Doped Indium Sulfide Film Deposited by Spray Pyrolysis* revista: **Coatings** 11 (4), 370, issn: 20796412 An: 2021 Authors: 11 WOS: 000642934600001 **FI = 3.12** [link](#)
43. B Tiss, A Ben Fradj, N Bouguila, **D Cristea**, C Croitoru, M Kraini, C Vázquez-Vázquez, L Cunha, C Moura, S Alaya *Electrical Behavior and Photocatalytic Activity of Ag-Doped In₂S₃ Thin Films* revista: **Journal of Electronic Materials** 50 (6), 3739-3747, issn: 0361-5235 An: 2021 Authors: 10 WOS: 000640473000008 **FI = 2.10** [link](#)
44. 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* revista: **Materials Chemistry and Physics** 270, 124838, issn: 0361-5235 An: 2021 Authors: 14 WOS: 000671215400001 **FI = 4.60** [link](#)
45. Mihail Lungu, Cornel Staicu, Flaviu Baiasu, Alexandru Marin, Bogdan Butoi, **Daniel Cristea**, Oana Gloria Pompilian, Claudiu Locovei, Corneliu Porosnicu *Deposition, Morphological, and Mechanical Evaluation of W and Be-Al₂O₃ and Er₂O₃ Co-Sputtered Films in Comparison with Pure Oxides* revista: **Coatings** 11 (11), 1430, issn: 20796412 An: 2021 Authors: 9 WOS: 000758812600001 **FI = 3.40** [link](#)
46. Yuhou Wu, Huisen Zhang, Guangyu Yan, Lusheng Liu, **Daniel Cristea**, He Wang, Yumiao Yang, Jianhui Shen *Hot filament chemical vapor deposition temperature field optimization for diamond films deposited on silicon nitride substrates* revista: **Materials Research Express** 8 (11), 116403, issn: 2053-1591 An: 2021 Authors: 8 WOS: 000717278500001 **FI = 2.30** [link](#)
47. Vasile Tiron, Mihai Alexandru Ciolan, Georgiana Bulai, **Daniel Cristea**, Ioana-Laura Velicu *Effect of Pulsing Configuration and Magnetic Balance Degree on*

Mechanical Properties of CrN Coatings Deposited by Bipolar-HiPIMS onto Floating Substrate revista: **Coatings** 11 (12), 1526, issn: 20796412 An: 2021 Authors: 5 WOS: 000736194600001 **FI = 3.40** [link](#)

48. **Daniel Cristea**, Ioana-Laura Velicu, Luis Cunha, Nuno Barradas, Eduardo Alves, Valentin Craciun *Tantalum-Titanium Oxynitride Thin Films Deposited by DC Reactive Magnetron Co-Sputtering: Mechanical, Optical, and Electrical Characterization* revista: **Coatings** 12 (1), 36, issn: 20796412 An: 2022 Authors: 6 WOS: 000746538600001 **Main author FI = 3.40** [link](#)
49. Vasile Tiron, Elena-Laura Ursu, **Daniel Cristea**, Georgiana Bulai, George Stoian, Teodora Matei, Ioana-Laura Velicu. *Room temperature deposition of nanocrystalline SiC thin films by DCMS/HiPIMS co-sputtering technique* revista: **Nanomaterials**, issn: 2079-4991 An: 2022 Authors: 7 WOS: 000759498900001 **Main author FI = 5.71** [link](#)
50. M. Elisa, S.-M. Iordache, A.-M. Iordache, C.R. Stefan, I.C. Vasiliu, **D. Cristea**, D. Ursutiu, C. Samoila, B.A. Sava, L. Boroica, M.C. Dinca, A.V. Filip, M. Eftimie, M Enculescu. *Investigations Regarding the Addition of ZnO and Li₂O-TiO₂ to Phosphate-Tellurite Glasses: Structural, Chemical, and Mechanical Properties* revista: **Materials** 15 (5), 1644, issn: 1996-1944 An: 2022 Authors: 14 **Main author** WOS: 000774225400001 **FI = 3.74** [link](#)
51. **Daniel Cristea**, Cătălin Croitoru, Alexandru Marin, Marius Dobromir, Elena Laura Ursu, Ioana Laura Velicu, Vasile Tiron, Valentin Crăciun, Luis Cunha. *On the chemistry, photocatalytical, and corrosion behavior of co-sputtered tantalum and titanium oxynitride thin films*, revista: **Applied Surface Science** Vol 592, Aug 2022, 153260, issn: 01694332 Year 2022 WOS: 000807355500004 **Main author FI = 7.39** [link](#)
52. Yuhou Wu, Yumiao Yang, Guangyu Yan, **Daniel Cristea**. *Wear behaviour of gradient-multilayer diamond coatings deposited on cemented-carbide substrates*, revista: **Surface Engineering** Vol 38, Iul 2022, 507-519, issn: 0267-0844 Year 2022 WOS: 000828571700001 **FI = 2.45** [link](#)
53. E.A. Laszlo, D. Crăciun, G. Dorcioman, G. Crăciun, V. Geantă, I. Voiculescu, **D. Cristea**, V Crăciun. *Characteristics of Thin High Entropy Alloy Films Grown by Pulsed Laser Deposition*, revista: **Coatings** Vol 12 (8), Aug 2022, 1211, issn: 20796412 Year 2022 WOS: 000846020100001 **FI = 3.23** [link](#)
54. Mihail Lungu; **Daniel Cristea**; Flaviu Baiasu; Cornel Staicu; Alexandru Marin; Oana Gloria Pompilian; Bogdan Butoi; Claudiu Locovei; Corneliu Porosnicu. *Surface, structural, and mechanical properties enhancement of Cr₂O₃ and SiO₂ co-deposited coatings with W or Be*. revista: **Nanomaterials** Vol 12 (16), Aug 2022, 2870, issn: 2079-4991 Year 2022 WOS: 000845332200001 **FI = 5.71** [link](#)

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