Catalin Vitelaru

List of Publications by Year
in descending order

38 papers	826 citations	516681 16 h-index	501174 28 g-index
38 all docs	38 docs citations	38 times ranked	873 citing authors

#	Article	IF	Citations
1	Optical Properties and Stability of Copper Thin Films for Transparent Thermal Heat Reflectors. Metals, 2022, 12, 262.	2.3	5
2	Silver-Containing Thin Films on Transparent Polymer Foils for Antimicrobial Applications. Coatings, 2022, 12, 170.	2.6	7
3	Synthesis and Investigation of Antibacterial Activity of Thin Films Based on TiO2-Ag and SiO2-Ag with Potential Applications in Medical Environment. Nanomaterials, 2022, 12, 902.	4.1	8
4	Thin Films Deposition of Ta2O5 and ZnO by E-Gun Technology on Co-Cr Alloy Manufactured by Direct Metal Laser Sintering. Materials, 2021, 14, 3666.	2.9	5
5	Correlation between Substrate Ion Fluxes and the Properties of Diamond-Like Carbon Films Deposited by Deep Oscillation Magnetron Sputtering in Ar and Ar + Ne Plasmas. Coatings, 2020, 10, 914.	2.6	8
6	Improvement of CoCr Alloy Characteristics by Ti-Based Carbonitride Coatings Used in Orthopedic Applications. Coatings, 2020, 10, 495.	2.6	11
7	High power impulse magnetron sputtering of diamond-like carbon coatings. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2020, 38, .	2.1	12
8	A Strategy for Alleviating Micro Arcing during HiPIMS Deposition of DLC Coatings. Materials, 2020, 13, 1038.	2.9	6
9	Orange Snowâ€"A Saharan Dust Intrusion over Romania During Winter Conditions. Remote Sensing, 2019, 11, 2466.	4.0	20
10	Discharge runaway in high power impulse magnetron sputtering of carbon: the effect of gas pressure, composition and target peak voltage. Journal Physics D: Applied Physics, 2018, 51, 165201.	2.8	12
11	Block Copolymer Elastomer with Graphite Filler: Effect of Processing Conditions and Silane Coupling Agent on the Composite Properties. Polymers, 2018, 10, 46.	4.5	15
12	Sequential PLD in oxygen/argon gas mixture of Al-doped ZnO thin films with improved electrical and optical properties. Applied Surface Science, 2017, 418, 456-462.	6.1	27
13	Design, fabrication and characterization of TiO 2 -SiO 2 multilayer with tailored color glazing for thermal solar collectors. Materials and Design, 2017, 130, 275-284.	7.0	21
14	Ti atom and Ti ion number density evolution in standard and multi-pulse HiPIMS. Journal Physics D: Applied Physics, 2017, 50, 365202.	2.8	22
15	Influence of hemp fibers with modified surface on polypropylene composites. Journal of Industrial and Engineering Chemistry, 2016, 37, 137-146.	5.8	67
16	The effect of cellulose nanofibers on the crystallinity and nanostructure of poly(lactic acid) composites. Journal of Materials Science, 2016, 51, 9771-9791.	3.7	64
17	Tunable Optical Properties of SiNxThin Films by OES Monitoring in a Reactive RF Magnetron Plasma. Plasma Processes and Polymers, 2016, 13, 208-216.	3.0	4
18	TiSiC, TiSiC-Zr, and TiSiC-Cr Coatingsâ€"Corrosion Resistance and Tribological Performance in Saline Solution. Tribology Transactions, 2016, 59, 72-79.	2.0	7

#	Article	IF	Citations
19	Argon metastables in HiPIMS: validation of the ionization region model by direct comparison to time resolved tunable diode-laser diagnostics. Plasma Sources Science and Technology, 2015, 24, 045011.	3.1	33
20	The effect of TiSiN interlayers on the bond strength of ceramic to NiCr and CoCr alloys. Ceramics International, 2015, 41, 8051-8058.	4.8	17
21	Synthesis and Characterization of TiSiON Biocompatible Thin Films Used in Biomedical Applications. Science of Advanced Materials, 2015, 7, 1351-1360.	0.7	6
22	Corrosion behaviour of Ti6Al4V alloy in artificial saliva solution with fluoride content and low pH value. Materialwissenschaft Und Werkstofftechnik, 2014, 45, 91-98.	0.9	12
23	Characterization of the Ti-10Nb-10Zr-5Ta Alloy for Biomedical Applications. Part 2: Wettability, Tribological Performance and Biocompatibility. Journal of Materials Engineering and Performance, 2014, 23, 326-332.	2.5	7
24	Investigation of nanostructured TiSiCâ€“Zr and TiSiCâ€“Cr hard coatings for industrial applications. Surface and Coatings Technology, 2014, 251, 21-28.	4.8	16
25	Spokes and charged particle transport in HiPIMS magnetrons. Journal Physics D: Applied Physics, 2013, 46, 084005.	2.8	91
26	Plasma reactivity in high-power impulse magnetron sputtering through oxygen kinetics. Applied Physics Letters, 2013, 103, .	3.3	14
27	Tiâ€“Ar scattering cross sections by direct comparison of Monte Carlo simulations and laser-induced fluorescence spectroscopy in magnetron discharges. Journal Physics D: Applied Physics, 2013, 46, 175201.	2.8	34
28	Influence of Thermal Treatment on the Roughness, Corrosion Resistance and Wettability of Hydroxyapatite Films Deposited by RF Magnetron Sputtering. Key Engineering Materials, 2013, 587, 297-302.	0.4	4
29	TiSiN Coatings for Improved Bond Strength of CoCr Alloy to Dental Ceramic. Key Engineering Materials, 2013, 587, 275-281.	0.4	1
30	Argon metastables in HiPIMS: time-resolved tunable diode-laser diagnostics. Plasma Sources Science and Technology, 2012, 21, 025010.	3.1	84
31	Understanding deposition rate loss in high power impulse magnetron sputtering: I. Ionization-driven electric fields. Plasma Sources Science and Technology, 2012, 21, 025005.	3.1	64
32	Space-resolved velocity and flux distributions of sputtered Ti atoms in a planar circular magnetron discharge. Plasma Sources Science and Technology, 2011, 20, 045020.	3.1	23
33	The break-down of hyperfine structure coupling induced by the Zeeman effect on aluminum 2S1/2â†'2P1/2 transition, measured by tunable diode-laser induced fluorescence. Journal of Applied Physics, 2011, 109, 084911.	2.5	4
34	Time resolved metal line profile by near-ultraviolet tunable diode laser absorption spectroscopy. Journal of Applied Physics, 2011, 109, 053307.	2.5	33
35	Tunable diode-laser induced fluorescence on Al and Ti atoms in low pressure magnetron discharges. Journal Physics D: Applied Physics, 2010, 43, 124013.	2.8	23
36	Pressure Effect on the Velocity and Flux Distributions of Sputtered Metal Species in Magnetron Discharge Measured by Space-Resolved Tunable Diode Laser Induced Fluorescence. Plasma Processes and Polymers, 2009, 6, S326-S330.	3.0	11

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37	Carbon and Tungsten Sputtering in a Helium Magnetron Discharge. IEEE Transactions on Plasma Science, 2009, 37, 1581-1585.	1.3	4
38	On the anisotropy and thermalization of the metal sputtered atoms in a low-pressure magnetron discharge. Europhysics Letters, 2008, 82, 15002.	2.0	24