Luis Acg Cunha

List of Publications by Year
in descending order

78 papers	1,956 citations	257450 24 h-index	265206 42 g-index
78 all docs	78 docs citations	78 times ranked	1812 citing authors

#	Article	IF	Citations
1	Microstructure of CrN coatings produced by PVD techniques. Thin Solid Films, 1999, 355-356, 465-471.	1.8	127
2	Corrosion of CrN and TiAlN coatings in chloride-containing atmospheres. Surface and Coatings Technology, 1999, 116-119, 1152-1160.	4.8	102
3	Characterisation of chromium nitride films produced by PVD techniques. Thin Solid Films, 2001, 398-399, 501-506.	1.8	98
4	Structural, electrical, optical, and mechanical characterizations of decorative ZrOxNy thin films. Journal of Applied Physics, 2005, 98, 023715.	2.5	87
5	Residual stress, surface defects and corrosion resistance of CrN hard coatings. Surface and Coatings Technology, 1999, 111, 158-162.	4.8	84
6	Tuning of the surface plasmon resonance in TiO2/Au thin films grown by magnetron sputtering: The effect of thermal annealing. Journal of Applied Physics, 2011, 109, .	2.5	74
7	Corrosion of TiN, (TiAl)N and CrN hard coatings produced by magnetron sputtering. Thin Solid Films, 1998, 317, 351-355.	1.8	67
8	Influence of the chemical and electronic structure on the electrical behavior of zirconium oxynitride films. Journal of Applied Physics, 2008, 103, .	2.5	66
9	Property change in ZrNxOy thin films: effect of the oxygen fraction and bias voltage. Thin Solid Films, 2004, 469-470, 11-17.	1.8	65
10	Corrosion resistance of multilayer coatings deposited by PVD techniques onto the brass substrate. Journal of Materials Processing Technology, 2005, 164-165, 816-821.	6.3	54
11	Corrosion resistance of ZrNxOy thin films obtained by rf reactive magnetron sputtering. Thin Solid Films, 2004, 469-470, 274-281.	1.8	52
12	Performance of chromium nitride and titanium nitride coatings during plastic injection moulding. Surface and Coatings Technology, 2002, 153, 160-165.	4.8	51
13	The influence of annealing treatments on the properties of Ag:TiO2 nanocomposite films prepared by magnetron sputtering. Applied Surface Science, 2012, 258, 4028-4034.	6.1	49
14	Structural evolution in ZrNxOy thin films as a function of temperature. Surface and Coatings Technology, 2006, 200, 2917-2922.	4.8	46
15	Nanoscale color control of TiO2 films with embedded Au nanoparticles. Materials Letters, 2010, 64, 2624-2626.	2.6	45
16	Development of new decorative coatings based on gold nanoparticles dispersed in an amorphous TiO2 dielectric matrix. Surface and Coatings Technology, 2010, 204, 1569-1575.	4.8	44
17	Functional and optical properties of Au:TiO2 nanocomposite films: The influence of thermal annealing. Applied Surface Science, 2010, 256, 6536-6542.	6.1	43
18	Raman spectra and structural analysis in ZrOxNy thin films. Thin Solid Films, 2006, 515, 1132-1137.	1.8	38

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19	Tantalum Oxynitride Thin Films: Assessment of the Photocatalytic Efficiency and Antimicrobial Capacity. Nanomaterials, 2019, 9, 476.	4.1	38
20	Performance of chromium nitride based coatings under plastic processing conditions. Surface and Coatings Technology, 2000, 133-134, 61-67.	4.8	37
21	Properties of tantalum oxynitride thin films produced by magnetron sputtering: The influence of processing parameters. Vacuum, 2013, 98, 63-69.	3.5	33
22	Tribocorrosion behaviour of ZrOxNy thin films for decorative applications. Surface and Coatings Technology, 2006, 200, 6634-6639.	4.8	32
23	Structural stability of decorative ZrNxOy thin films. Surface and Coatings Technology, 2005, 200, 748-752.	4.8	27
24	Development of dark Ti(C,O,N) coatings prepared by reactive sputtering. Surface and Coatings Technology, 2008, 203, 804-807.	4.8	24
25	ZrO_{<i>x</i>}N_{<i>y</i>}decorative thin films prepared by the reactive gas pulsing process. Journal Physics D: Applied Physics, 2009, 42, 195501.	2.8	24
26	Influence of composition and structural properties in the tribological behaviour of magnetron sputtered Tiâ€“Siâ€“C nanostructured thin films, prepared at low temperature. Wear, 2010, 268, 552-557.	3.1	24
27	Zr-O-N coatings for decorative purposes: Study of the system stability by exploration of the deposition parameter space. Surface and Coatings Technology, 2018, 343, 30-37.	4.8	23
28	Properties of MoNxOy thin films as a function of the N/O ratio. Thin Solid Films, 2006, 494, 201-206.	1.8	22
29	Physical and morphological characterization of reactively magnetron sputtered TiN films. Thin Solid Films, 2002, 420-421, 421-428.	1.8	21
30	The influence of structure changes in the properties of TiCxOy decorative thin films. Thin Solid Films, 2007, 515, 5424-5429.	1.8	21
31	Structure and chemical bonds in reactively sputtered black Tiâ€“Câ€“Nâ€“O thin films. Thin Solid Films, 2011, 520, 144-151.	1.8	20
32	Multifunctional Tiâ€“Me (Me=Al, Cu) thin film systems for biomedical sensing devices. Vacuum, 2015, 122, 353-359.	3.5	20
33	Biological behaviour of thin films consisting of Au nanoparticles dispersed in a TiO2 dielectric matrix. Vacuum, 2015, 122, 360-368.	3.5	20
34	Optical properties of zirconium oxynitride films: The effect of composition, electronic and crystalline structures. Applied Surface Science, 2015, 358, 660-669.	6.1	19
35	Effect of thermal treatments on the structure of MoNxOy thin films. Vacuum, 2008, 82, 1428-1432.	3.5	18
36	Raman analysis of Siâ€“Câ€“N films grown by reactive magnetron sputtering. Thin Solid Films, 2004, 469-470, 410-415.	1.8	17

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37	The effect of bombarding conditions on the properties of multifunctional Tiâ€“Câ€“O thin films grown by magnetron sputtering. Surface and Coatings Technology, 2007, 202, 946-951.	4.8	17
38	Effect of nitrogen gas flow on amorphous Siâ€“Câ€“N films produced by PVD techniques. Surface and Coatings Technology, 2003, 174-175, 324-330.	4.8	16
39	Structural and optical studies of Au doped titanium oxide films. Nuclear Instruments & Methods in Physics Research B, 2012, 272, 61-65.	1.4	16
40	Ultra-Short Pulse HiPIMS: A Strategy to Suppress Arcing during Reactive Deposition of SiO2 Thin Films with Enhanced Mechanical and Optical Properties. Coatings, 2020, 10, 633.	2.6	16
41	Influence of silver doping on physical properties of sprayed In2S3 films for solar cells application. Journal of Materials Science: Materials in Electronics, 2021, 32, 4568-4580.	2.2	16
42	Structure dependent resistivity and dielectric characteristics of tantalum oxynitride thin films produced by magnetron sputtering. Applied Surface Science, 2015, 354, 298-305.	6.1	14
43	Functional behaviour of TiO₂ films doped with noble metals. Surface Engineering, 2016, 32, 554-561.	2.2	14
44	Development of tantalum oxynitride thin films produced by PVD: Study of structural stability. Applied Surface Science, 2013, 285, 19-26.	6.1	13
45	Tantalum oxynitride thin films: Mechanical properties and wear behavior dependence on growth conditions. Surface and Coatings Technology, 2014, 258, 587-596.	4.8	13
46	Concentrated solar energy used for sintering magnesium titanates for electronic applications. Applied Surface Science, 2018, 438, 59-65.	6.1	13
47	Au-WO3 Nanocomposite Coatings for Localized Surface Plasmon Resonance Sensing. Materials, 2020, 13, 246.	2.9	12
48	Structural, mechanical and piezoelectric properties of polycrystalline AlN films sputtered on titanium bottom electrodes. Applied Surface Science, 2015, 354, 267-278.	6.1	11
49	Electrical transport of sprayed In2S3:Ag thin films. Materials Science in Semiconductor Processing, 2020, 114, 105080.	4.0	11
50	Structural, chemical, optical and mechanical properties of Au doped AlN sputtered coatings. Surface and Coatings Technology, 2014, 255, 130-139.	4.8	9
51	Deposition temperature influence on the wear behaviour of carbon-based coatings deposited on hardened steel. Applied Surface Science, 2019, 475, 762-773.	6.1	9
52	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, 2021, 270, 124838.	4.0	9
53	Compositional and structural changes in ZrOxNy films depending on growth condition. Nuclear Instruments & Methods in Physics Research B, 2006, 249, 458-461.	1.4	8
54	Tiâ€“Siâ€“C Thin Films Produced by Magnetron Sputtering: Correlation Between Physical Properties, Mechanical Properties and Tribological Behavior. Journal of Nanoscience and Nanotechnology, 2010, 10, 2926-2932.	0.9	8

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55	Surface Plasmon Resonance Effect on the Optical Properties of TiO₂ Doped by Noble Metals Nanoparticles. Journal of Nano Research, 0, 18-19, 177-185.	0.8	8
56	Influence of the Physical Properties on the Antibacterial and Photocatalytic Behavior of Ag-Doped Indium Sulfide Film Deposited by Spray Pyrolysis. Coatings, 2021, 11, 370.	2.6	8
57	Study on the Thermal Stability of Ti(C,O,N) Decorative Coatings. Plasma Processes and Polymers, 2009, 6, S755.	3.0	7
58	Composition and structure variation for magnetron sputtered tantalum oxynitride thin films, as function of deposition parameters. Applied Surface Science, 2015, 358, 508-517.	6.1	7
59	Optical and microstructural properties of Au alloyed Alâ€“O sputter deposited coatings. Thin Solid Films, 2016, 598, 65-71.	1.8	7
60	Thermal stability of Zr-O-N(:Ti) thin films prepared by magnetron sputtering. Vacuum, 2018, 151, 148-155.	3.5	7
61	Development of a statistical method to help evaluating the transparency/opacity of decorative thin films. Applied Surface Science, 2018, 438, 51-58.	6.1	7
62	Amorphous AlN films grown by ALD from trimethylaluminum and monomethylhydrazine. Dalton Transactions, 2021, 50, 15062-15070.	3.3	7
63	Tribological characterisation of magnetron sputtered Ti(C, O, N) thin films. International Journal of Materials and Product Technology, 2010, 39, 186.	0.2	6
64	Friction and wear behaviours of Ti(C,O,N) dark decorative coatings. Tribology International, 2011, 44, 820-828.	5.9	6
65	Tantalum-Titanium Oxynitride Thin Films Deposited by DC Reactive Magnetron Co-Sputtering: Mechanical, Optical, and Electrical Characterization. Coatings, 2022, 12, 36.	2.6	6
66	The Role of Modulated IR Radiometry Measurements in the Characterization of Zrï£¿Oï£¿N Thin Films. Plasma Processes and Polymers, 2009, 6, S760.	3.0	5
67	Si Doped and Un-Doped CrN Thin Films Produced by Magnetron Sputtering: Structural and Mechanical Properties. Journal of Nano Research, 0, 18-19, 201-211.	0.8	5
68	Electrical Behavior and Photocatalytic Activity of Ag-Doped In2S3 Thin Films. Journal of Electronic Materials, 2021, 50, 3739-3747.	2.2	4
69	Deposition of Ti-Zr-O-N films by reactive magnetron sputtering of Zr target with Ti ribbons. Surface and Coatings Technology, 2021, 409, 126737.	4.8	3
70	Effect of substrate bias voltage on amorphous Siâ€“Câ€“N films produced by PVD techniques. Thin Solid Films, 2004, 447-448, 436-442.	1.8	1
71	Nanostructured Materials: Formation, Characterization, and Propertiesâ€"Latest Advances in 1D, 2D, and 3D Nanostructures. Advances in Materials Science and Engineering, 2014, 2014, 1-2.	1.8	1
72	In-situ XRD vs ex-situ vacuum annealing of tantalum oxynitride thin films: Assessments on the structural evolution. Applied Surface Science, 2018, 438, 14-19.	6.1	1

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73	Evaluation of thermal properties of thin films by IR radiometry using a comprehensive set of Zr-O-N thin films. Applied Surface Science, 2019, 498, 143666.	6.1	1
74	Functionalization of Orthodontic Alloys with DLC Coatings. , 2019, , .		1
75	Dataset for additional information on the evaluation of thermal properties of thin films by IR radiometry using a comprehensive set of Zrâ€"Oâ€"N thin films. Data in Brief, 2020, 29, 105291.	1.0	1
76	Properties of PVD Coatings on a Brass Substrate. Materials Science Forum, 2003, 437-438, 199-202.	0.3	0
77	Structure and Chemical Bonds in Black Ti(C, N, O) Thin Films. , 2010, , .		0
78	Corrosion Behavior of Titanium Oxynitrided by Diffusion and Magnetron Sputtering Methods in Physiological Solution. Materials Performance and Characterization, 2017, 6, 594-606.	0.3	0