RadomÃr ÄŒerstvÃ½

List of Publications by Year
in descending order

72 papers	1,956 citations	236612 25 h-index	276539 41 g-index
72 all docs	72 docs citations	72 times ranked	1622 citing authors

#	Article	IF	Citations
1	Dependence of the ZrO2 growth on the crystal orientation: growth simulations and magnetron sputtering. Applied Surface Science, 2022, 572, 151422.	3.1	9
2	Transfer of the sputter technique for deposition of strongly thermochromic VO2-based coatings on ultrathin flexible glass to large-scale roll-to-roll device. Surface and Coatings Technology, 2022, 442, 128273.	2.2	10
3	Pulsed Magnetron Sputtering of Strongly Thermochromic VO2-Based Coatings with a Transition Temperature of 22 Â°C onto Ultrathin Flexible Glass. Coatings, 2020, 10, 1258.	1.2	11
4	Tunable composition and properties of Al-O-N films prepared by reactive deep oscillation magnetron sputtering. Surface and Coatings Technology, 2020, 392, 125716.	2.2	5
5	Effect of positive pulse voltage in bipolar reactive HiPIMS on crystal structure, microstructure and mechanical properties of CrN films. Surface and Coatings Technology, 2020, 393, 125773.	2.2	27
6	Extraordinary high-temperature behavior of electrically conductive Hf7B23Si22C6N40 ceramic film. Surface and Coatings Technology, 2020, 391, 125686.	2.2	5
7	Flexible hard (Zr, Si) alloy films prepared by magnetron sputtering. Thin Solid Films, 2019, 688, 137216.	0.8	9
8	Impact of Al or Si addition on properties and oxidation resistance of magnetron sputtered Zrâ€"Hfâ€"Al/Siâ€"Cu metallic glasses. Journal of Alloys and Compounds, 2019, 772, 409-417.	2.8	10
9	Effect of annealing on structure and properties of Taâ€"Oâ€"N films prepared by high power impulse magnetron sputtering. Ceramics International, 2019, 45, 9454-9461.	2.3	10
10	Significant improvement of the performance of ZrO2/V1-W O2/ZrO2 thermochromic coatings by utilizing a second-order interference. Solar Energy Materials and Solar Cells, 2019, 191, 365-371.	3.0	46
11	Coating of overstoichiometric transition metal nitrides (TMN_x (x > 1)) by magnetron sputtering. Japanese Journal of Applied Physics, 2019, 58, SAAD10.	0.8	3
12	Tribological properties and oxidation resistance of tungsten and tungsten nitride films at temperatures up to 500â€¯Â°C. Tribology International, 2019, 132, 211-220.	3.0	20
13	Tuning properties and behavior of magnetron sputtered Zr-Hf-Cu metallic glasses. Journal of Alloys and Compounds, 2018, 739, 848-855.	2.8	8
14	Thermal stability of structure, microstructure and enhanced properties of Zrâ€"Taâ€"O films with a low and high Ta content. Surface and Coatings Technology, 2018, 335, 95-103.	2.2	5
15	Î²- (Me1, Me2) and MeNx films deposited by magnetron sputtering: Novel heterostructural alloy and compound films. Surface and Coatings Technology, 2018, 337, 75-81.	2.2	16
16	Effect of energy on macrostress in Ti(Al,V)N films prepared by magnetron sputtering. Vacuum, 2018, 158, 52-59.	1.6	10
17	Properties of thermochromic VO2 films prepared by HiPIMS onto unbiased amorphous glass substrates at a low temperature of 300â€¯Â°C. Thin Solid Films, 2018, 660, 463-470.	0.8	26
18	Hard TiN2 dinitride films prepared by magnetron sputtering. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2018, 36, .	0.9	4

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19	Structure and properties of Hf-O-N films prepared by high-rate reactive HiPIMS with smoothly controlled composition. Ceramics International, 2017, 43, 5661-5667.	2.3	22
20	(Zr,Ti,O) alloy films with enhanced hardness and resistance to cracking prepared by magnetron sputtering. Surface and Coatings Technology, 2017, 322, 86-91.	2.2	9
21	Reactive high-power impulse magnetron sputtering of ZrO2 films with gradient ZrOx interlayers on pretreated steel substrates. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2017, 35, 031503.	0.9	7
22	Amorphous Zr-Cu thin-film alloys with metallic glass behavior. Journal of Alloys and Compounds, 2017, 696, 1298-1306.	2.8	73
23	Evolution of microstructure and macrostress in sputtered hard Ti(Al,V)N films with increasing energy delivered during their growth by bombarding ions. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2017, 35, .	0.9	25
24	Effect of energy on structure, microstructure and mechanical properties of hard Ti(Al,V)Nx films prepared by magnetron sputtering. Surface and Coatings Technology, 2017, 332, 190-197.	2.2	23
25	Controlled reactive HiPIMSâ€"effective technique for low-temperature (300 Â°C) synthesis of VO₂films with semiconductor-to-metal transition. Journal Physics D: Applied Physics, 2017, 50, 38LT01.	1.3	38
26	Thermal effects of laser marking on microstructure and corrosion properties of stainless steel. Applied Optics, 2016, 55, D35.	2.1	22
27	Flexible antibacterial Zr-Cu-N thin films resistant to cracking. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2016, 34, .	0.9	17
28	Thickness dependent wetting properties and surface free energy of HfO2 thin films. Applied Physics Letters, 2016, 108, .	1.5	28
29	Flexible hydrophobic ZrN nitride films. Vacuum, 2016, 131, 34-38.	1.6	30
30	Effect of energy on the formation of flexible hard Al-Si-N films prepared by magnetron sputtering. Vacuum, 2016, 133, 43-45.	1.6	19
31	Dependence of characteristics of MSiBCN (M = Ti, Zr, Hf) on the choice of metal element: Experimental and ab-initio study. Thin Solid Films, 2016, 616, 359-365.	0.8	14
32	Protection of brittle film against cracking. Applied Surface Science, 2016, 370, 306-311.	3.1	15
33	Superior high-temperature oxidation resistance of magnetron sputtered Hfâ€"Bâ€"Siâ€"Câ€"N film. Ceramics International, 2016, 42, 4853-4859.	2.3	28
34	High-rate reactive high-power impulse magnetron sputtering of hard and optically transparent HfO 2 films. Surface and Coatings Technology, 2016, 290, 58-64.	2.2	49
35	Physical and mechanical properties of Ti/Al multilayer heat releasing coatings. International Journal of Nanomanufacturing, 2015, 11, 78.	0.3	9
36	Flexible antibacterial Alâ€"Cuâ€"N films. Surface and Coatings Technology, 2015, 264, 114-120.	2.2	18

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37	Thermal stability and transformation phenomena in magnetron sputtered Alâ€“Cuâ€“O films. Ceramics International, 2015, 41, 6020-6029.	2.3	3
38	Dependence of structure and properties of hard nanocrystalline conductive films MBCN (M = Ti, Zr,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	0.8	10
39	Mechanical and tribological properties of Sn-Cu-O films prepared by reactive magnetron sputtering. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2014, 32, 021504.	0.9	1
40	Thermally activated transformations in metastable alumina coatings prepared by magnetron sputtering. Surface and Coatings Technology, 2014, 240, 7-13.	2.2	14
41	Hard multifunctional Hfâ€“Bâ€“Siâ€“C films prepared by pulsed magnetron sputtering. Surface and Coatings Technology, 2014, 257, 301-307.	2.2	20
42	High-rate reactive high-power impulse magnetron sputtering of Taâ€“Oâ€“N films with tunable composition and properties. Thin Solid Films, 2014, 566, 70-77.	0.8	29
43	Effect of Nitrogen Content on the Microstructure and Hardness of Hard Zrâ€“Bâ€“Câ€“N Films. Microscopy and Microanalysis, 2014, 20, 1892-1893.	0.2	2
44	Hard nanocrystalline Zrâ€“Bâ€“Câ€“N films with high electrical conductivity prepared by pulsed magnetron sputtering. Surface and Coatings Technology, 2013, 215, 186-191.	2.2	23
45	Process stabilization and a significant enhancement of the deposition rate in reactive high-power impulse magnetron sputtering of ZrO2 and Ta2O5 films. Surface and Coatings Technology, 2013, 236, 550-556.	2.2	72
46	Mechanical and tribological properties of sputtered Moâ€“Oâ€“N coatings. Surface and Coatings Technology, 2013, 215, 386-392.	2.2	10
47	Thermal co-decomposition of silver acetylacetonate and tin(II) hexafluoroacetylacetonate: Formation of carbonaceous Ag/AgxSn(x=4 and 6.7)/SnO2 composites. Thermochimica Acta, 2013, 566, 92-99.	1.2	4
48	Pulsed reactive magnetron sputtering of high-temperature Siâ€“Bâ€“Câ€“N films with high optical transparency. Surface and Coatings Technology, 2013, 226, 34-39.	2.2	22
49	Antibacterial Crâ€“Cuâ€“O films prepared by reactive magnetron sputtering. Applied Surface Science, 2013, 276, 660-666.	3.1	25
50	The effect of addition of Al in ZrO2 thin film on its resistance to cracking. Surface and Coatings Technology, 2012, 207, 355-360.	2.2	32
51	Transparent Zrâ€“Alâ€“O oxide coatings with enhanced resistance to cracking. Surface and Coatings Technology, 2012, 206, 2105-2109.	2.2	48
52	Two-phase single layer Al-O-N nanocomposite films with enhanced resistance to cracking. Surface and Coatings Technology, 2012, 206, 4230-4234.	2.2	39
53	Properties of nanocrystalline Alâ€“Cuâ€“O films reactively sputtered by DC pulse dual magnetron. Applied Surface Science, 2011, 258, 1762-1767.	3.1	36
54	Two-functional DC sputtered Cu-containing TiO2 thin films. Journal of Photochemistry and Photobiology A: Chemistry, 2010, 209, 158-162.	2.0	20

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55	Thermal stability of magnetron sputtered Siâ€“Bâ€“Câ€“N materials at temperatures up to 1700Â°C. Thin Solid Films, 2010, 519, 306-311.	0.8	41
56	Coefficient of friction and wear of sputtered a-C thin coatings containing Mo. Surface and Coatings Technology, 2010, 205, 1486-1490.	2.2	16
57	Thermal stability of alumina thin films containing Î³-Al2O3 phase prepared by reactive magnetron sputtering. Applied Surface Science, 2010, 257, 1058-1062.	3.1	115
58	Tribological and mechanical properties of nanocrystalline-TiC/a-C nanocomposite thin films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2010, 28, 244-249.	0.9	114
59	Protective Zr-containing SiO2 coatings resistant to thermal cycling in air up to 1400ÂÂ°C. Surface and Coatings Technology, 2009, 203, 1502-1507.	2.2	13
60	Two-Functional Direct Current Sputtered Silver-Containing Titanium Dioxide Thin Films. Nanoscale Research Letters, 2009, 4, 313-320.	3.1	19
61	Nanostructure of photocatalytic TiO2 films sputtered at temperatures below 200Â°C. Applied Surface Science, 2008, 254, 3793-3800.	3.1	55
62	Properties of magnetron sputtered Alâ€“Siâ€“N thin films with a low and high Si content. Surface and Coatings Technology, 2008, 202, 3485-3493.	2.2	56
63	Formation of crystalline Alâ€“Tiâ€“O thin films and their properties. Surface and Coatings Technology, 2008, 202, 6064-6069.	2.2	17
64	Structureâ€“property relations of arc-evaporated Alâ€“Crâ€“Siâ€“N coatings. Surface and Coatings Technology, 2008, 202, 3555-3562.	2.2	78
65	Effect of the gas mixture composition on high-temperature behavior of magnetron sputtered Siâ€“Bâ€“Câ€“N coatings. Surface and Coatings Technology, 2008, 203, 466-469.	2.2	42
66	Magnetron sputtered Siâ€“Bâ€“Câ€“N films with high oxidation resistance and thermal stability in air at temperatures above 1500â€‰Â°C. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2008, 26, 1101-1108.	0.9	27
67	Role of energy in low-temperature high-rate formation of hydrophilic TiO2 thin films using pulsed magnetron sputtering. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2007, 25, 666-674.	0.9	73
68	Oxidation of Sputtered Cu, Zr, ZrCu, ZrO2, and Zr-Cu-O Films during Thermal Annealing in Flowing Air. Plasma Processes and Polymers, 2007, 4, S536-S540.	1.6	4
69	Hard and superhard nanocomposite Alâ€“Cuâ€“N films prepared by magnetron sputtering. Surface and Coatings Technology, 2001, 142-144, 603-609.	2.2	33
70	Control of structure in magnetron sputtered thin films. Surface and Coatings Technology, 2001, 142-144, 201-205.	2.2	10
71	Structure and properties of hard and superhard Zrâ€“Cuâ€“N nanocomposite coatings. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2000, 289, 189-197.	2.6	139
72	Microwave plasma nitriding of a low-alloy steel. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2000, 18, 2715-2721.	0.9	14