Jindrich Musil

List of Publications by Year
in descending order

296 papers	11,356 citations	34076 52 h-index	38368 95 g-index
299 all docs	299 docs citations	299 times ranked	4980 citing authors

#	Article	IF	Citations
1	Hard and superhard nanocomposite coatings. Surface and Coatings Technology, 2000, 125, 322-330.	2.2	959
2	Relationships between hardness, Young's modulus and elastic recovery in hard nanocomposite coatings. Surface and Coatings Technology, 2002, 154, 304-313.	2.2	602
3	Hard nanocomposite coatings: Thermal stability, oxidation resistance and toughness. Surface and Coatings Technology, 2012, 207, 50-65.	2.2	576
4	Reactive magnetron sputtering of thin films: present status and trends. Thin Solid Films, 2005, 475, 208-218.	0.8	329
5	Toughness of hard nanostructured ceramic thin films. Surface and Coatings Technology, 2007, 201, 5148-5152.	2.2	312
6	Superhard nanocomposite Ti1â^’xAlxN films prepared by magnetron sputtering. Thin Solid Films, 2000, 365, 104-109.	0.8	243
7	Magnetron sputtering of hard nanocomposite coatings and their properties. Surface and Coatings Technology, 2001, 142-144, 557-566.	2.2	205
8	ZrN/Cu nanocomposite filmâ€”a novel superhard material. Surface and Coatings Technology, 1999, 120-121, 179-183.	2.2	200
9	A comparative study on reactive and non-reactive unbalanced magnetron sputter deposition of TiN coatings. Thin Solid Films, 2002, 415, 151-159.	0.8	190
10	Microstructure and properties of nanocomposite Tiâ€“Bâ€“N and Tiâ€“Bâ€“C coatings. Surface and Coatings Technology, 1999, 120-121, 405-411.	2.2	170
11	Flexible hard nanocomposite coatings. RSC Advances, 2015, 5, 60482-60495.	1.7	168
12	Lowâ€energy (â^¼100 eV) ion irradiation during growth of TiN deposited by reactive magnetron sputtering: Effects of ion flux on film microstructure. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1991, 9, 434-438.	0.9	157
13	Structureâ€“property relationships in single- and dual-phase nanocrystalline hard coatings. Surface and Coatings Technology, 2003, 174-175, 725-731.	2.2	148
14	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
15	Thermal stability of alumina thin films containing Î^{3}-Al2O3 phase prepared by reactive magnetron sputtering. Applied Surface Science, 2010, 257, 1058-1062.	3.1	115
16	Hard and superhard Zrâ€“Niâ€“N nanocomposite films. Surface and Coatings Technology, 2001, 139, 101-109.	2.2	114
17	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
18	Thermal stability of PVD hard coatings. Vacuum, 2003, 71, 279-284.	1.6	113

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19	Magnetron sputtering of films with controlled texture and grain size. Materials Chemistry and Physics, 1998, 54, 116-122.	2.0	111
20	Pulsed dc Magnetron Discharges and their Utilization in Plasma Surface Engineering. Contributions To Plasma Physics, 2004, 44, 426-436.	0.5	110
21	Reactive sputtering of TiN films at large substrate to target distances. Vacuum, 1990, 40, 435-444.	1.6	105
22	Low-pressure magnetron sputtering. Vacuum, 1998, 50, 363-372.	1.6	104
23	Low-stress superhard Tiî—¸B films prepared by magnetron sputtering. Surface and Coatings Technology, 2003, 174-175, 744-753.	2.2	97
24	Low-temperature sputtering of crystalline TiO2 films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2006, 24, 521-528.	0.9	97
25	Hard nanocomposite Zrâ€“Yâ€“N coatings, correlation between hardness and structure. Surface and Coatings Technology, 2000, 127, 99-106.	2.2	94
26	Structure of TiN coatings deposited at relatively high rates and low temperatures by magnetron sputtering. Thin Solid Films, 1988, 156, 53-64.	0.8	93
27	Ion-assisted sputtering of TiN films. Surface and Coatings Technology, 1990, 43-44, 259-269.	2.2	86
28	New results in d.c. reactive magnetron deposition of TiNx films. Thin Solid Films, 1988, 167, 107-120.	0.8	84
29	Magnetron sputtered Crî—¸Niî—¸N and Tiî—¸Moî—¸N films: comparison of mechanical properties. Surface and Coatings Technology, 2001, 142-144, 146-151.	2.2	75
30	High-power pulsed sputtering using a magnetron with enhanced plasma confinement. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2007, 25, 42-47.	0.9	75
31	Nanocrystalline and nanocomposite CrCu and CrCuâ€“N films prepared by magnetron sputtering. Surface and Coatings Technology, 1999, 115, 32-37.	2.2	73
32	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
33	Pulsed dc magnetron discharge for high-rate sputtering of thin films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2001, 19, 420-424.	0.9	71
34	Composite TiNâ€“Ni thin films deposited by reactive magnetron sputter ion-plating. Surface and Coatings Technology, 1998, 110, 168-172.	2.2	70
35	Reactive magnetron sputtering of TiOx films. Surface and Coatings Technology, 2005, 193, 107-111.	2.2	69
36	Hard amorphous nanocomposite coatings with oxidation resistance above 1000Â°C. Advances in Applied Ceramics, 2008, 107, 148-154.	0.6	68

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37	Hysteresis effect in reactive sputtering: a problem of system stability. Journal Physics D: Applied Physics, 1986, 19, L187-L190.	1.3	67
38	Reactive deposition of tin films using an unbalanced magnetron. Surface and Coatings Technology, 1989, 39-40, 487-497.	2.2	67
39	Sputtering systems with magnetically enhanced ionization for ion plating of TiN films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1990, 8, 1318-1324.	0.9	65
40	Hydrophobicity of Thin Films of Compounds of Lowâ€Electronegativity Metals. Journal of the American Ceramic Society, 2014, 97, 2713-2717.	1.9	62
41	Ion flux characteristics in high-power pulsed magnetron sputtering discharges. Europhysics Letters, 2007, 77, 45002.	0.7	61
42	Unbalanced magnetrons and new sputtering systems with enhanced plasma ionization. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1991, 9, 1171-1177.	0.9	60
43	Recent advances in magnetron sputtering technology. Surface and Coatings Technology, 1998, 100-101, 280-286.	2.2	60
44	Arc evaporation of hard coatings: Process and film properties. Surface and Coatings Technology, 1990, 43-44, 299-311.	2.2	58
45	Composition, structure, microhardness and residual stress of Wâ€"Tiâ€"N films deposited by reactive magnetron sputtering. Thin Solid Films, 2002, 408, 136-147.	0.8	58
46	Structure and mechanical properties of magnetron sputtered Zrâ€"Tiâ€"Cuâ€"N films. Surface and Coatings Technology, 2003, 166, 243-253.	2.2	58
47	Structure and properties of magnetron sputtered Zrâ€"Siâ€"N films with a high (â‰¥25 at.%) Si content. Thin Solid Films, 2005, 478, 238-247.	0.8	57
48	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
49	Dependence of microstructure of TiN coatings on their thickness. Thin Solid Films, 1988, 158, 225-232.	0.8	55
50	Nanostructure of photocatalytic TiO2 films sputtered at temperatures below 200Â°C. Applied Surface Science, 2008, 254, 3793-3800.	3.1	55
51	Microwave plasma: its characteristics and applications in thin film technology. Vacuum, 1986, 36, 161-169.	1.6	54
52	Structure-hardness relations in sputtered Tiâ€"Alâ€"Vâ€"N films. Thin Solid Films, 2003, 444, 189-198.	0.8	54
53	Magnetron sputtering of alloy and alloy-based films. Thin Solid Films, 1999, 343-344, 47-50.	0.8	53
54	Mechanical characterization of a-C:H:SiOx coatings synthesized using radio-frequency plasma-assisted chemical vapor deposition method. Thin Solid Films, 2015, 590, 299-305.	0.8	53

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55	Cathodic arc evaporation in thin film technology. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1992, 10, 1740-1748.	0.9	52
56	Structure and mechanical properties of DC magnetron sputtered TiC/Cu films. Vacuum, 2006, 81, 531-538.	1.6	52
57	A perspective of magnetron sputtering in surface engineering. Surface and Coatings Technology, 1999, 112, 162-169.	2.2	50
58	Properties of reactively sputtered Wâ€“Siâ€“N films. Surface and Coatings Technology, 2006, 200, 3886-3895.	2.2	50
59	Structural analysis of tin films by Seemann-Bohlin X-ray diffraction. Thin Solid Films, 1990, 193-194, 401-408.	0.8	48
60	Transparent Zrâ€“Alâ€“O oxide coatings with enhanced resistance to cracking. Surface and Coatings Technology, 2012, 206, 2105-2109.	2.2	48
61	Reactive deposition of hard coatings. Surface and Coatings Technology, 1989, 39-40, 301-314.	2.2	47
62	Formation of nanocrystalline NiCrâ€“N films by reactive dc magnetron sputtering. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1998, 16, 3301-3304.	0.9	47
63	TiNx coatings prepared by d.c. reactive magnetron sputtering. Thin Solid Films, 1986, 136, 229-239.	0.8	46
64	Influence of the pumping speed on the hysteresis effect in the reactive sputtering of thin films. Vacuum, 1987, 37, 729-738.	1.6	46
65	Studies on Magnetron Sputtering Assisted by Inductively Coupled RF Plasma for Enhanced Metal Ionization. Japanese Journal of Applied Physics, 1999, 38, 4291-4295.	0.8	45
66	Relation of deposition conditions of Ti-N films prepared by d.c. magnetron sputtering to their microstructure and macrostress. Surface and Coatings Technology, 1993, 60, 484-488.	2.2	44
67	Low pressure magnetron sputtering and selfsputtering discharges. Vacuum, 1996, 47, 307-311.	1.6	44
68	Highâ€rate magnetron sputtering. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1996, 14, 2187-2191.	0.9	44
69	Hard a-Si₃N₄/MeN_x Nanocomposite Coatings with High Thermal Stability and High Oxidation Resistance. Solid State Phenomena, 2007, 127, 31-36.	0.3	44
70	Effect of ion bombardment on properties of hard reactively sputtered Ti(Fe)Nx films. Surface and Coatings Technology, 2004, 177-178, 289-298.	2.2	43
71	Discharge in dual magnetron sputtering system. IEEE Transactions on Plasma Science, 2005, 33, 338-339.	0.6	43
72	Difference in high-temperature oxidation resistance of amorphous Zrâ€“Siâ€“N and Wâ€“Siâ€“N films with a high Si content. Applied Surface Science, 2006, 252, 8319-8325.	3.1	43

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73	Effect of addition of Cu into ZrOx film on its properties. Surface and Coatings Technology, 2006, 200, 6792-6800.	2.2	43
74	Magnetron sputtering of TiOxNy films. Vacuum, 2006, 81, 285-290.	1.6	43
75	High-temperature oxidation resistance of Taâ€“Siâ€“N films with a high Si content. Surface and Coatings Technology, 2006, 200, 4091-4096.	2.2	42
76	Relationship between mechanical properties and coefficient of friction of sputtered a-C/Cu composite thin films. Diamond and Related Materials, 2008, 17, 1905-1911.	1.8	42
77	X-ray analysis of strain in titanium nitride layers. Thin Solid Films, 1987, 149, 49-60.	0.8	41
78	X-ray analysis of heat-treated titanium nitride films. Thin Solid Films, 1989, 170, 201-210.	0.8	41
79	Structure and microhardness of magnetron sputtered ZrCu and ZrCu-N films. Vacuum, 1999, 52, 269-275.	1.6	41
80	Comparison of hydrophilic properties of TiO2 thin films prepared by solâ€“gel method and reactive magnetron sputtering system. Thin Solid Films, 2011, 519, 6944-6950.	0.8	41
81	Thermal stability of magnetron sputtered Zrâ€“Siâ€“N films. Surface and Coatings Technology, 2006, 201, 3368-3376.	2.2	40
82	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
83	Recent progress in plasma nitriding. Vacuum, 2000, 59, 940-951.	1.6	37
84	Protective over-layer coating preventing cracking of thin films deposited on flexible substrates. Surface and Coatings Technology, 2014, 240, 275-280.	2.2	37
85	Physical properties and high-temperature oxidation resistance of sputtered Si[sub 3]N[sub 4]âˆ•MoN[sub x] nanocomposite coatings. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2005, 23, 1568.	1.6	36
86	Properties of nanocrystalline Alâ€“Cuâ€“O films reactively sputtered by DC pulse dual magnetron. Applied Surface Science, 2011, 258, 1762-1767.	3.1	36
87	Plasma spray deposition of graded metal-ceramic coatings. Surface and Coatings Technology, 1992, 52, 211-220.	2.2	34
88	Flexible hard Al-Si-N films for high temperature operation. Surface and Coatings Technology, 2016, 307, 1112-1118.	2.2	34
89	Îµ-Ti2N phase growth control in titanium nitride films. Thin Solid Films, 1989, 170, L55-L58.	0.8	33
90	Hard and superhard nanocomposite Alâ€“Cuâ€“N films prepared by magnetron sputtering. Surface and Coatings Technology, 2001, 142-144, 603-609.	2.2	33

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91	Measurement of hardness of superhard films by microindentation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2003, 340, 281-285.	2.6	33
92	Physical and mechanical properties of sputtered Taâ€“Siâ€“N films with a high (â‰¥40 atâ€Š%) content of Si. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2004, 22, 646.	0.9	33
93	High-rate reactive deposition of transparent SiO2 films containing low amount of Zr from molten magnetron target. Thin Solid Films, 2010, 519, 775-777.	0.8	32
94	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
95	Contamination of Magnetron Sputtered Metallic Films by Oxygen From Residual Atmosphere in Deposition Chamber. Plasma Processes and Polymers, 2015, 12, 416-421.	1.6	32
96	Absorption of electromagnetic waves in a radially inhomogeneous plasma at high magnetic fields. Plasma Physics, 1975, 17, 1147-1153.	0.9	31
97	TiN films grown by reactive magnetron sputtering with enhanced ionization at low discharge pressures. Vacuum, 1990, 41, 2233-2238.	1.6	31
98	Physical and Mechanical Properties of Hard Nanocomposite Films Prepared by Reactive Magnetron Sputtering. Nanostructure Science and Technology, 2006, , 407-463.	0.1	31
99	Enhanced hardness in sputtered Zrâ€“Niâ€“N films. Surface and Coatings Technology, 2006, 200, 6293-6297.	2.2	31
100	Flexible hydrophobic ZrN nitride films. Vacuum, 2016, 131, 34-38.	1.6	30
101	Anomalous absorption of intense electromagnetic waves in plasma at high magnetic fields. Plasma Physics, 1974, 16, 735-739.	0.9	29
102	Formation of high temperature phases in sputter deposited Tiâ€based films below 100â€‰Â°C. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1996, 14, 2247-2250.	0.9	29
103	A study on the synthesis and microstructure of WCâ€“TiN superlattice coating. Surface and Coatings Technology, 2000, 131, 372-377.	2.2	29
104	Evolution of film temperature during magnetron sputtering. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2006, 24, 1083-1090.	0.9	29
105	Microhardness of Ti-N films containing the epsilon -Ti2N phase. Journal Physics D: Applied Physics, 1988, 21, 1657-1658.	1.3	28
106	Modeling of inhomogeneous film deposition and target erosion in reactive sputtering. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1990, 8, 1560-1565.	0.9	27
107	On picostructural models of physically vapor-deposited films of titanium nitride. Surface and Coatings Technology, 1991, 49, 181-187.	2.2	27
108	Growth and properties of hard coatings prepared by physical vapor deposition methods. Surface and Coatings Technology, 1992, 54-55, 287-296.	2.2	27

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109	Nucleation of ultrathin silver layer by magnetron sputtering in Ar/N2 plasma. Surface and Coatings Technology, 2013, 228, S86-S90.	2.2	27
110	High-rate pulsed reactive magnetron sputtering of oxide nanocomposite coatings. Vacuum, 2013, 87, 96-102.	1.6	26
111	Antibacterial Crâ€"Cuâ€"O films prepared by reactive magnetron sputtering. Applied Surface Science, 2013, 276, 660-666.	3.1	25
112	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
113	Inductively-Coupled-Plasma-Assisted Planar Magnetron Discharge for Enhanced Ionization of Sputtered Atoms. Japanese Journal of Applied Physics, 1997, 36, 4568-4571.	0.8	24
114	A comparison of internal plasma parameters in a conventional planar magnetron and a magnetron with additional plasma confinement. Plasma Sources Science and Technology, 1997, 6, 46-52.	1.3	24
115	Plasma nitriding enhanced by hollow cathode discharge â€" a new method for formation of superhard nanocomposite coatings on steel surfaces. Vacuum, 1999, 55, 171-175.	1.6	24
116	The Role of Energy in Formation of Sputtered Nanocomposite Films. Materials Science Forum, 2005, 502, 291-296.	0.3	24
117	Present status of thin oxide films creation in a microwave plasma. European Physical Journal D, 1980, 30, 688-708.	0.4	23
118	Deposition of thin films using microwave plasmas: present status and trends. Vacuum, 1996, 47, 145-155.	1.6	23
119	The effect of Al composition on the microstructure and mechanical properties of WCâ€"TiAlN superhard composite coating. Surface and Coatings Technology, 2001, 142-144, 596-602.	2.2	23
120	RF magnetron sputtering of silver thin film in Ne, Ar and Kr dischargesâ€"plasma characterisation and surface morphology. Surface and Coatings Technology, 2013, 228, S466-S469.	2.2	23
121	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
122	A method of formation of thin oxide films on silicon in a microwave magnetoactive oxygen plasma. Journal Physics D: Applied Physics, 1975, 8, L195-L197.	1.3	22
123	Morphology and Microstructure of Hard and Superhard Zrâ€"Cuâ€"N Nanocomposite Coatings. Japanese Journal of Applied Physics, 2002, 41, 6529-6533.	0.8	22
124	Hard Nanocomposite Coatings Prepared by Magnetron Sputtering. Key Engineering Materials, 2002, 230-232, 613-622.	0.4	22
125	In-situ X-ray diffraction studies of time and thickness dependence of crystallization of amorphous TiO2 thin films and stress evolution. Thin Solid Films, 2010, 519, 1649-1654.	0.8	22
126	High-rate low-temperature dc pulsed magnetron sputtering of photocatalytic TiO2 films: the effect of repetition frequency. Nanoscale Research Letters, 2007, 2, 123-129.	3.1	21

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127	Investigation of the Negative Ions in Ar/O₂ Plasma of Magnetron Sputtering Discharge with Al:Zn Target by Ion Mass Spectrometry. Plasma Processes and Polymers, 2011, 8, 459-464.	1.6	21
128	Flexible Antibacterial Coatings. Molecules, 2017, 22, 813.	1.7	21
129	Planar magnetron sputtering discharge enhanced with radio frequency or microwave magnetoactive plasma. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1997, 15, 1999-2006.	0.9	20
130	Two-functional DC sputtered Cu-containing TiO2 thin films. Journal of Photochemistry and Photobiology A: Chemistry, 2010, 209, 158-162.	2.0	20
131	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
132	Penetration of a strong electromagnetic wave in an inhomogeneous plasma generated by ECR using a magnetic beach. Plasma Physics, 1971, 13, 471-476.	0.9	19
133	100 GW pulsed iodine photodissociation laser system PERUN I. European Physical Journal D, 1988, 38, 1337-1356.	0.4	19
134	Ti-Si-N Films with a High Content of Si. Plasma Processes and Polymers, 2007, 4, S574-S578.	1.6	19
135	Two-Functional Direct Current Sputtered Silver-Containing Titanium Dioxide Thin Films. Nanoscale Research Letters, 2009, 4, 313-320.	3.1	19
136	Generation of Positive and Negative Oxygen Ions in Magnetron Discharge During Reactive Sputtering of Alumina. Plasma Processes and Polymers, 2010, 7, 910-914.	1.6	19
137	Hard Nanocomposite Coatings. , 2014, , 325-353.		19
138	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
139	Rectangular magnetron with full target erosion. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1999, 17, 555-563.	0.9	18
140	Formation of Ti1â€"x Si x and Ti1â€"x Si x N films by magnetron co-sputtering. European Physical Journal D, 1999, 49, 359-372.	0.4	18
141	The depth profile analysis of W-Si-N coatings after thermal annealing. Surface and Coatings Technology, 2002, 161, 111-119.	2.2	18
142	Flexible antibacterial Alâ€"Cuâ€"N films. Surface and Coatings Technology, 2015, 264, 114-120.	2.2	18
143	Absorption of microwave energy in a plasma column at high magnetic fields. Physics Letters, Section A: General, Atomic and Solid State Physics, 1974, 50, 309-310.	0.9	17
144	Differences between microwave and RF activation of nitrogen for the PECVD process. Journal Physics D: Applied Physics, 1982, 15, L79-L82.	1.3	17

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145	Laser-stimulated growth of the Îµî—¸Ti2N phase in Tiî—¸N films during d.c. reactive magnetron sputter deposition. Thin Solid Films, 1991, 196, 265-270.	0.8	17
146	Plasma nitriding combined with a hollow cathode discharge sputtering at high pressures. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1997, 15, 2636-2643.	0.9	17
147	Magnetron sputtering of alloy-based films and its specifity. European Physical Journal D, 1998, 48, 1209-1224.	0.4	17
148	Control of macrostress Ïƒ in reactively sputtered Moâ€“Alâ€“N films by total gas pressure. Vacuum, 2006, 80, 588-592.	1.6	17
149	Novel model for film growth based on surface temperature developing during magnetron sputtering. Surface and Coatings Technology, 2007, 202, 486-493.	2.2	17
150	Formation of crystalline Alâ€“Tiâ€“O thin films and their properties. Surface and Coatings Technology, 2008, 202, 6064-6069.	2.2	17
151	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
152	Optimized magnetic field shape for low pressure magnetron sputtering. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1995, 13, 389-393.	0.9	16
153	Relationship between structure and mechanical properties in hard Alâ€“Siâ€“Cuâ€“N films prepared by magnetron sputtering. Thin Solid Films, 2002, 413, 121-130.	0.8	16
154	Coefficient of friction and wear of sputtered a-C thin coatings containing Mo. Surface and Coatings Technology, 2010, 205, 1486-1490.	2.2	16
155	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
156	Microstructure of titanium nitride thin films controlled by ion bombardment in a magnetron-sputtering device. Surface and Coatings Technology, 1994, 64, 111-117.	2.2	15
157	Optical emission spectra and ion energy distribution functions in TiN deposition process by reactive pulsed magnetron sputtering. Surface and Coatings Technology, 2005, 200, 835-840.	2.2	15
158	Plasma Drift in Dual Magnetron Discharge. IEEE Transactions on Plasma Science, 2008, 36, 1412-1413.	0.6	15
159	Protection of brittle film against cracking. Applied Surface Science, 2016, 370, 306-311.	3.1	15
160	Mass spectrometry investigation of magnetron sputtering discharges. Vacuum, 2017, 143, 438-443.	1.6	15
161	Effect of the polarization of the electromagnetic wave on wave energy absorption caused by the linear transformation of waves. European Physical Journal D, 1972, 22, 133-137.	0.4	14
162	Optical emission spectra from microwave oxygen plasma produced by surfatron discharge. European Physical Journal D, 1993, 43, 533-540.	0.4	14

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163	Production of Ti films with controlled texture. Surface and Coatings Technology, 1995, 76-77, 274-279.	2.2	14
164	Planar magnetron with additional plasma confinement. Vacuum, 1995, 46, 341-347.	1.6	14
165	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
166	Magnetron Discharges for Thin Films Plasma Processing. , 2006, , 67-110.		14
167	Effect of Al Addition on Structure and Properties of Sputtered TiC Films. Plasma Processes and Polymers, 2007, 4, S6-S10.	1.6	14
168	Effect of nitrogen on tribological properties of amorphous carbon films alloyed with titanium. Surface and Coatings Technology, 2011, 205, S84-S88.	2.2	14
169	Thermally activated transformations in metastable alumina coatings prepared by magnetron sputtering. Surface and Coatings Technology, 2014, 240, 7-13.	2.2	14
170	Hard Coatings Prepared by Sputtering and Arc Evaporation. Physics of Thin Films, 1993, 17, 79-144.	1.1	14
171	Nitrogen activation for plasma chemical synthesis of thin Si3N4 films. Thin Solid Films, 1983, 102, 107-110.	0.8	13
172	Influence of deposition rate on properties of reactively sputtered TiNx films. Vacuum, 1988, 38, 459-461.	1.6	13
173	A pulsed iodine photodissociation laser with slow pumping. Laser and Particle Beams, 1992, 10, 871-890.	0.4	13
174	Thermal annealing of sputtered Alâ€“Siâ€“Cuâ€“N films. Vacuum, 2003, 72, 21-28.	1.6	13
175	Synthesis of TiO2 photocatalyst and study on their improvement technology of photocatalytic activity. Surface and Coatings Technology, 2005, 200, 534-538.	2.2	13
176	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
177	Retardation of electromagnetic waves by helices of large diameters. European Physical Journal D, 1979, 29, 175-188.	0.4	12
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