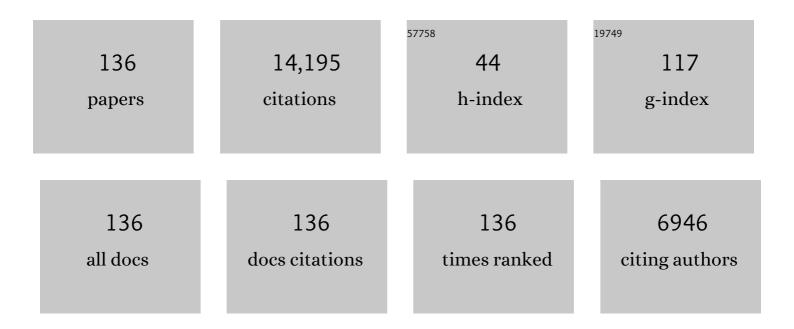
List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Plasma electrolysis for surface engineering. Surface and Coatings Technology, 1999, 122, 73-93.	4.8	2,548
2	On the significance of the H/E ratio in wear control: a nanocomposite coating approach to optimised tribological behaviour. Wear, 2000, 246, 1-11.	3.1	2,330
3	Characterisation of oxide films produced by plasma electrolytic oxidation of a Ti–6Al–4V alloy. Surface and Coatings Technology, 2000, 130, 195-206.	4.8	589
4	An electrochemical impedance spectroscopy study of the corrosion behaviour of PVD coated steels in 0.5 N NaCl aqueous solution: Part II Corrosion Science, 2003, 45, 1257-1273.	6.6	446
5	Discharge characterization in plasma electrolytic oxidation of aluminium. Journal Physics D: Applied Physics, 2003, 36, 2110-2120.	2.8	404
6	Abrasive wear/corrosion properties and TEM analysis of Al2O3 coatings fabricated using plasma electrolysis. Surface and Coatings Technology, 2002, 149, 245-251.	4.8	387
7	Design criteria for wear-resistant nanostructured and glassy-metal coatings. Surface and Coatings Technology, 2004, 177-178, 317-324.	4.8	386
8	Deposition of layered bioceramic hydroxyapatite/TiO2 coatings on titanium alloys using a hybrid technique of micro-arc oxidation and electrophoresis. Surface and Coatings Technology, 2000, 125, 407-414.	4.8	370
9	Anodic processes in plasma electrolytic oxidation of aluminium in alkaline solutions. Electrochimica Acta, 2004, 49, 2085-2095.	5.2	363
10	An electrochemical impedance spectroscopy study of the corrosion behaviour of PVD coated steels in 0.5 N NaCl aqueous solution: Part I. Establishment of equivalent circuits for EIS data modelling. Corrosion Science, 2003, 45, 1243-1256.	6.6	323
11	Evaluation of PVD nitride coatings, using impact, scratch and Rockwell-C adhesion tests. Thin Solid Films, 1995, 270, 431-438.	1.8	299
12	Thickness effects on the mechanical properties of micro-arc discharge oxide coatings on aluminium alloys. Surface and Coatings Technology, 1999, 116-119, 1055-1060.	4.8	258
13	The use of scratch adhesion testing for the determination of interfacial adhesion: The importance of frictional drag. Surface and Coatings Technology, 1988, 36, 503-517.	4.8	251
14	Oxide ceramic coatings on aluminium alloys produced by a pulsed bipolar plasma electrolytic oxidation process. Surface and Coatings Technology, 2005, 199, 150-157.	4.8	244
15	Kinetic aspects of aluminium titanate layer formation on titanium alloys by plasma electrolytic oxidation. Applied Surface Science, 2002, 200, 172-184.	6.1	238
16	Corrosion resistance of multi-layered plasma-assisted physical vapour deposition TiN and CrN coatings. Surface and Coatings Technology, 2001, 141, 164-173.	4.8	205
17	Structure, mechanical and tribological properties of nitrogen-containing chromium coatings prepared by reactive magnetron sputtering. Surface and Coatings Technology, 1999, 115, 222-229.	4.8	177
18	Fatigue properties of Keronite® coatings on a magnesium alloy. Surface and Coatings Technology, 2004, 182, 78-84.	4.8	171

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19	Corrosion performance of some titanium-based hard coatings. Surface and Coatings Technology, 1991, 49, 489-495.	4.8	164
20	Low temperature plasma diffusion treatment of stainless steels for improved wear resistance. Surface and Coatings Technology, 1993, 62, 608-617.	4.8	158
21	Corrosion properties and contact resistance of TiN, TiAlN and CrN coatings in simulated proton exchange membrane fuel cell environments. Journal of Power Sources, 2010, 195, 3814-3821.	7.8	127
22	Characteristics of a plasma electrolytic nitrocarburising treatment for stainless steels. Surface and Coatings Technology, 2001, 139, 135-142.	4.8	123
23	Impact wear and abrasion resistance of CrN, AlCrN and AlTiN PVD coatings. Surface and Coatings Technology, 2013, 215, 170-177.	4.8	122
24	Spatial characteristics of discharge phenomena in plasma electrolytic oxidation of aluminium alloy. Surface and Coatings Technology, 2004, 177-178, 779-783.	4.8	117
25	Residual stresses in plasma electrolytic oxidation coatings on Al alloy produced by pulsed unipolar current. Surface and Coatings Technology, 2005, 200, 1580-1586.	4.8	115
26	A comparative study of the influence of plasma treatments, PVD coatings and ion implantation on the tribological performance of Ti–6Al–4V. Surface and Coatings Technology, 1999, 114, 70-80.	4.8	104
27	Hybrid techniques in surface engineering. Surface and Coatings Technology, 1995, 71, 88-92.	4.8	96
28	Thick Ti/TiN multilayered coatings for abrasive and erosive wear resistance. Surface and Coatings Technology, 1994, 70, 19-25.	4.8	92
29	Hard tribological Ti–B–N, Ti–Cr–B–N, Ti–Si–B–N and Ti–Al–Si–B–N coatings. Surface a Technology, 2005, 200, 208-212.	nd Coatin 4.8	gs ₈₆
30	Corrosion performance of layered coatings produced by physical vapour deposition. Surface and Coatings Technology, 1990, 43-44, 481-492.	4.8	84
31	Structure, hardness and mechanical properties of magnetron-sputtered titanium–aluminium boride films. Surface and Coatings Technology, 1999, 120-121, 412-417.	4.8	84
32	Effects of solution pH and electrical parameters on hydroxyapatite coatings deposited by a plasma-assisted electrophoresis technique. Journal of Biomedical Materials Research Part B, 2001, 57, 612-618.	3.1	84
33	Evaluating the microstructure and performance of nanocomposite PVD TiAlBN coatings. Surface and Coatings Technology, 2002, 151-152, 338-343.	4.8	80
34	Enhanced plasma nitriding at low pressures: A comparative study of d.c. and r.f. techniques. Surface and Coatings Technology, 1990, 41, 295-304.	4.8	75
35	Duplex surface treatments combining plasma electrolytic nitrocarburising and plasma-immersion ion-assisted deposition. Surface and Coatings Technology, 2001, 142-144, 1129-1136.	4.8	72
36	Investigation into high-temperature corrosion in a large-scale municipal waste-to-energy plant. Corrosion Science, 2010, 52, 3861-3874.	6.6	72

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37	Structure, mechanical and tribological properties of sputtered TiAlBN thin films. Surface and Coatings Technology, 1999, 113, 126-133.	4.8	69
38	A study of the reciprocating-sliding wear performance of plasma surface treated titanium alloy. Wear, 2010, 269, 60-70.	3.1	69
39	Deposition of duplex Al2O3/DLC coatings on Al alloys for tribological applications using a combined micro-arc oxidation and plasma-immersion ion implantation technique. Surface and Coatings Technology, 2000, 131, 506-513.	4.8	66
40	A comparative study of the corrosion performance of TiN, Ti(B,N) and (Ti,Al)N coatings produced by physical vapour deposition methods. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1991, 140, 722-726.	5.6	64
41	Metallurgical study of low-temperature plasma carbon diffusion treatments for stainless steels. Surface and Coatings Technology, 1993, 60, 416-423.	4.8	58
42	Tribological evaluation of AISI 304 stainless steel duplex treated by plasma electrolytic nitrocarburising and diamond-like carbon coating. Wear, 2002, 253, 986-993.	3.1	57
43	TiN and CrN PVD coatings on electroless nickel-coated steel substrates. Surface and Coatings Technology, 1993, 60, 474-479.	4.8	54
44	The nanostructure and mechanical properties of PVD CrCu (N) coatings. Surface and Coatings Technology, 2003, 162, 222-227.	4.8	49
45	Material transfer phenomena and failure mechanisms of a nanostructured Cr–Al–N coating in laboratory wear tests and an industrial punch tool application. Surface and Coatings Technology, 2008, 203, 816-821.	4.8	47
46	A comparative study of the cyclic thermal oxidation of PVD nickel aluminide coatings. Surface and Coatings Technology, 2002, 155, 67-79.	4.8	45
47	Structure and corrosion properties of PVD Cr–N coatings. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2002, 20, 772-780.	2.1	44
48	Microstructure of direct current and pulse magnetron sputtered Cr–B coatings. Thin Solid Films, 2006, 515, 1511-1516.	1.8	43
49	Cyclic oxidation resistance of Ni–Al alloy coatings deposited on steel by a cathodic arc plasma process. Surface and Coatings Technology, 2001, 135, 158-165.	4.8	42
50	Plasmaâ€based surface engineering processes for wear and corrosion protection. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1995, 13, 1202-1207.	2.1	41
51	The effect of pulsed magnetron sputtering on the structure and mechanical properties of CrB2 coatings. Surface and Coatings Technology, 2006, 201, 3970-3976.	4.8	41
52	Low temperature deposition of Cr(N)/TiO2 coatings using a duplex process of unbalanced magnetron sputtering and micro-arc oxidation. Surface and Coatings Technology, 2000, 133-134, 331-337.	4.8	39
53	Characterisation and tribological evaluation of nitrogen-containing molybdenum–copper PVD metallic nanocomposite films. Surface and Coatings Technology, 2005, 190, 345-356.	4.8	39
54	The structure and properties of chromium diboride coatings deposited by pulsed magnetron sputtering of powder targets. Surface and Coatings Technology, 2005, 200, 1366-1371.	4.8	39

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55	Investigation of the nanostructure and wear properties of physical vapor deposited CrCuN nanocomposite coatings. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2005, 23, 423-433.	2.1	38
56	Tribological properties of duplex plasma oxidised, nitrided and PVD coated Ti–6Al–4V. Surface and Coatings Technology, 2011, 206, 395-404.	4.8	38
57	Evaluating the effects of plasma diffusion processing and duplex diffusion/PVD-coating on the fatigue performance of Ti–6Al–4V alloy. International Journal of Fatigue, 2011, 33, 1313-1323.	5.7	38
58	The influence of stacking fault energy on plasticity mechanisms in triode-plasma nitrided austenitic stainless steels: Implications for the structure and stability of nitrogen-expanded austenite. Acta Materialia, 2019, 164, 60-75.	7.9	38
59	The effect of boron additions on the tribological behaviour of TiN coatings produced by electron-beam evaporative PVD. Surface and Coatings Technology, 1999, 116-119, 648-653.	4.8	37
60	Wear behaviour of carbon-containing tungsten coatings prepared by reactive magnetron sputtering. Surface and Coatings Technology, 1999, 112, 85-90.	4.8	36
61	Hard and superhard TiAlBN coatings deposited by twin electron-beam evaporation. Surface and Coatings Technology, 2007, 201, 6078-6083.	4.8	36
62	Properties and Performance Crtialn of Multilayer Hard Coatings Deposited Using Magnetron Sputter Ion Plating. Surface Engineering, 2002, 18, 391-396.	2.2	35
63	Evaluation of some titanium-based ceramic coatings on high speed steel cutting tools. Surface and Coatings Technology, 1991, 49, 468-473.	4.8	34
64	Laser surface modification treatment of aluminum bronze with B4C. Applied Surface Science, 2012, 263, 804-809.	6.1	34
65	A simple transferable interatomic potential model for binary oxides applied to bulk and the (0001) surface. Journal of Crystal Growth, 2006, 290, 235-240.	1.5	33
66	The nanostructure, wear and corrosion performance of arc-evaporated CrBxNy nanocomposite coatings. Surface and Coatings Technology, 2009, 204, 246-255.	4.8	33
67	Impact wear resistance of plasma diffusion treated and duplex treated/PVD-coated Ti–6Al–4V alloy. Surface and Coatings Technology, 2012, 206, 2645-2654.	4.8	33
68	A model for galvanostatic anodising of Al in alkaline solutions. Electrochimica Acta, 2005, 50, 5458-5464.	5.2	32
69	Deposition of multicomponent chromium boride based coatings by pulsed magnetron sputtering of powder targets. Surface and Coatings Technology, 2005, 200, 1616-1623.	4.8	31
70	Substrate and bonding layer effects on performance of DLC and TiN biomedical coatings in Hank's solution under cyclic impact–sliding loads. Surface and Coatings Technology, 2013, 237, 219-229.	4.8	31
71	Tribological behaviour of pulsed magnetron sputtered CrB2 coatings examined by reciprocating sliding wear testing against aluminium alloy and steel. Surface and Coatings Technology, 2008, 202, 1470-1478.	4.8	30
72	Composition and structure-property relationships of chromium-diboride/molybdenum-disulphide PVD nanocomposite hard coatings deposited by pulsed magnetron sputtering. Applied Physics A: Materials Science and Processing, 2008, 91, 77-86.	2.3	24

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73	Evaluating the effects of PIRAC nitrogen-diffusion treatments on the mechanical performance of Ti–6Al–4V alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 619, 300-311.	5.6	24
74	Electron spectroscopic studies of nanocomposite PVD TiAlBN coatings. Vacuum, 2002, 67, 471-476.	3.5	23
75	Correlation of elastic modulus, hardness and density for sputtered TiAlBN thin films. Thin Solid Films, 2006, 514, 81-86.	1.8	23
76	The Structure and Mechanical Properties of Ti-Si-B Coatings Deposited by DC and Pulsed-DC Unbalanced Magnetron Sputtering. Plasma Processes and Polymers, 2007, 4, S687-S692.	3.0	23
77	Surface modification of Ti–6Al–4V alloys using triode plasma oxidation treatments. Surface and Coatings Technology, 2012, 206, 4553-4561.	4.8	23
78	Laser Texturing of Plasma Electrolytically Oxidized Aluminum 6061 Surfaces for Improved Hydrophobicity. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2014, 136, .	2.2	23
79	Evaluation of the sliding wear and corrosion performance of triode-plasma nitrided Fe-17Cr-20Mn-0.5N high-manganese and Fe-19Cr-35Ni-1.2Si high-nickel austenitic stainless steels. Surface and Coatings Technology, 2021, 409, 126890.	4.8	23
80	lonization in plasma-assisted physical vapour deposition systems. Surface and Coatings Technology, 1993, 61, 121-126.	4.8	22
81	Micro-abrasion wear testing of triode plasma diffusion and duplex treated Ti–6Al–4V alloy. Wear, 2012, 274-275, 377-387.	3.1	22
82	Growth behavior and microstructure of arc ion plated titanium dioxide. Surface and Coatings Technology, 2009, 204, 915-922.	4.8	21
83	An a.c. impedance study on PVD CrN-coated mild steel with different surface roughnesses. Surface and Coatings Technology, 1995, 76-77, 623-631.	4.8	20
84	The influence of process gas characteristics on the properties of plasma nitrided steel. Surface and Coatings Technology, 1995, 76-77, 694-699.	4.8	20
85	Triode plasma diffusion treatment of titanium alloys. Surface and Coatings Technology, 2012, 212, 20-31.	4.8	20
86	An investigation into the tribological performance of Physical Vapour Deposition (PVD) coatings on high thermal conductivity Cu-alloy substrates and the effect of an intermediate electroless Ni–P layer prior to PVD treatment. Thin Solid Films, 2012, 520, 2922-2931.	1.8	19
87	A coating thickness uniformity model for physical vapour deposition systems—further validity tests. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1991, 140, 576-582.	5.6	17
88	Optimization of Nanostructured Tribological Coatings. Nanostructure Science and Technology, 2006, , 511-538.	0.1	17
89	The influence of coatings on the oil-out performance of rolling bearings. Surface and Coatings Technology, 2007, 202, 1073-1077.	4.8	17
90	Characterization studies of pulse magnetron sputtered hard ceramic titanium diboride coatings alloyed with silicon. Acta Materialia, 2008, 56, 4172-4182.	7.9	17

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91	Pulsed-bias magnetron sputtering of non-conductive crystalline chromia films at low substrate temperature. Journal Physics D: Applied Physics, 2008, 41, 035309.	2.8	17
92	Substitution of hexavalent chromate conversion treatment with a plasma electrolytic oxidation process to improve the corrosion properties of ion vapour deposited AlMg coatings. Surface and Coatings Technology, 2010, 205, 1750-1756.	4.8	17
93	An investigation into the effect of Triode Plasma Oxidation (TPO) on the tribological properties of Ti6Al4V. Surface and Coatings Technology, 2011, 206, 1955-1962.	4.8	17
94	On the Nitrogen-Induced Lattice Expansion of a Non-stainless Austenitic Steel, Invar 36®, Under Triode Plasma Nitriding. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2020, 51, 436-447.	2.2	17
95	Mutifunctional arc ion plated TiO2 photocatalytic coatings with improved wear and corrosion protection. Surface and Coatings Technology, 2009, 203, 1689-1693.	4.8	16
96	High-rate reactive magnetron sputtering of zirconia films for laser optics applications. Applied Physics A: Materials Science and Processing, 2014, 116, 1229-1240.	2.3	16
97	Fabrication of Nb2O5/SiO2 mixed oxides by reactive magnetron co-sputtering. Thin Solid Films, 2015, 589, 95-104.	1.8	16
98	The combined effects of Cu and Ag on the nanostructure and mechanical properties of CrCuAgN PVD coatings. Surface and Coatings Technology, 2015, 284, 101-111.	4.8	16
99	On the interstitial induced lattice inhomogeneities in nitrogen-expanded austenite. Scripta Materialia, 2020, 185, 146-151.	5.2	16
100	The effect of process parameters on the plasma carbon diffusion treatment of stainless steels at low pressure. Surface and Coatings Technology, 1994, 63, 135-143.	4.8	15
101	Deposition of yttria-stablized zirconia films using arc ion plating. Surface and Coatings Technology, 2005, 200, 1401-1406.	4.8	15
102	The morphology and structure of PVD ZrN–Cu thin films. Journal Physics D: Applied Physics, 2009, 42, 085308.	2.8	15
103	A study of the nanostructure and hardness of electron beam evaporated TiAlBN Coatings. Thin Solid Films, 2010, 518, 4273-4280.	1.8	15
104	Enhanced surface performance of Ti-6Al-4V alloy using a novel duplex process combining PVD-Al coating and triode plasma oxidation. Surface and Coatings Technology, 2014, 257, 154-164.	4.8	15
105	Corrosion behaviour of triode plasma diffusion treated and PVD TiN-coated Ti–6Al–4V in acidified aqueous chloride environments. Surface and Coatings Technology, 2015, 280, 185-193.	4.8	15
106	CrCuAgN PVD nanocomposite coatings: Effects of annealing on coating morphology and nanostructure. Applied Surface Science, 2017, 392, 732-746.	6.1	15
107	Evaluation of some new titanium-based ceramic coatings in tribological model wear and metal-cutting tests. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1991, 140, 602-608.	5.6	14
108	Structure and mechanical properties of nitrogen-containing Zr–Cu based thin films deposited by pulsed magnetron sputtering. Journal Physics D: Applied Physics, 2008, 41, 155301.	2.8	13

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109	A study of neon–nitrogen interactions in d.c. glow discharges by optical emission spectroscopy. Thin Solid Films, 2001, 398-399, 507-512.	1.8	12
110	Process Developments Towards Producing Well Adherent Duplex PAPVD Coatings. Surface Engineering, 2003, 19, 37-44.	2.2	12
111	A TEM study of the structure of magnetron sputtered chromium diboride coatings. Journal of Physics: Conference Series, 2006, 26, 355-358.	0.4	12
112	Microstructure and Thermal Stress Distributions in Laser Carbonitriding Treatment of Ti–6Al–4V Alloy. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2011, 133, .	2.2	11
113	Corrosion behaviour and galvanic coupling with steel of Al-based coating alternatives to electroplated cadmium. Materials Chemistry and Physics, 2013, 141, 128-137.	4.0	11
114	The influence of process system characteristics on the uniformity of ion plated titanium nitride coatings. Vacuum, 1992, 43, 235-240.	3.5	10
115	Investigation of the nanostructure and post-coat thermal treatment of wear-resistant PVD CrTiCuBN coatings. Surface and Coatings Technology, 2005, 200, 310-314.	4.8	10
116	Mechanical and tribological properties of CrTiCu(B,N) glassy-metal coatings deposited by reactive magnetron sputtering. Surface and Coatings Technology, 2006, 200, 4601-4611.	4.8	10
117	Nanostructural studies of PVD TiAlB coatings. Surface and Interface Analysis, 2006, 38, 731-735.	1.8	9
118	A New Approach to the Deposition of Elemental Boron and Boron-Based Coatings by Pulsed Magnetron Sputtering of Loosely Packed Boron Powder Targets. Plasma Processes and Polymers, 2007, 4, S160-S165.	3.0	9
119	Tribological behaviour of thermochemically surface engineered steels. , 2015, , 241-266.		9
120	Deposition and characterization of nitrogen containing stainless steel coatings prepared by reactive magnetron sputtering. Vacuum, 1996, 47, 1077-1080.	3.5	8
121	Investigation into nitrogen–inert gas interactions in d.c. diode glow discharges. Surface and Coatings Technology, 2001, 142-144, 540-545.	4.8	8
122	An investigation of precipitation strengthened Inconel 718 superalloy after triode plasma nitriding. Surface and Coatings Technology, 2022, 442, 128401.	4.8	8
123	Small grain size zirconium-based coatings deposited by magnetron sputtering at low temperatures. Thin Solid Films, 2015, 591, 149-155.	1.8	6
124	Electrochemical impedance spectroscopy of PVD-TiN coatings on mild steel and AISI316 substrates. Surface and Coatings Technology, 1995, 76-77, 615-622.	4.8	5
125	The influence of neon in the deposition of titanium nitride by plasma-assisted physical vapour deposition. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1999, 262, 227-231.	5.6	5
126	Plasma immersion ion implantation as a technique in duplex and hybrid processing. Vacuum, 2002, 68, 57-64.	3.5	5

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127	Ion plating discharges: evidence of cluster formation during metal evaporation. Thin Solid Films, 2002, 414, 7-12.	1.8	5
128	Thermal cyclic performance of NiAl/alumina-stabilized zirconia thermal barrier coatings deposited using a hybrid arc and magnetron sputtering system. Surface and Coatings Technology, 2006, 201, 3901-3905.	4.8	5
129	Crystal size induced reduction in thermal hysteresis of Ni-Ti-Nb shape memory thin films. Applied Physics Letters, 2016, 108, .	3.3	5
130	Investigation of interactions between inert gases and nitrogen in direct current triode discharges. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2003, 21, 1683-1687.	2.1	3
131	Determination of the electron temperature profile above the evaporative source in an ion plating discharge by spatially resolved optical emission spectroscopy. Thin Solid Films, 2003, 434, 157-161.	1.8	1
132	Investigation of the nanostructure of as-deposited and post-coat annealed CrCuAgN PVD nanocomposite coatings. Materials Chemistry and Physics, 2020, 255, 123499.	4.0	1
133	Evidence of ionized metal clusters in ion plating discharges. Applied Physics Letters, 2002, 81, 1405-1407.	3.3	0
134	Influence of Surface Hardening Depth on the Cavitation Erosion Resistance of a Low Alloy Steel. Journal of ASTM International, 2011, 8, 1-12.	0.2	0
135	A Comparative Study of the Corrosion Behaviour of PVD Al-Based Coatings on Mild Steel by EIS and (AC)DC/AC Electrochemical Evaluation Techniques. , 2015, , .		0
136	Development of (AC)DC/AC Cyclic Electrochemical Corrosion Evaluation Protocols for Accelerated Testing of PVD Metallic Coatings. , 2016, , .		0