

Jia-hong Huang

List of Publications by Year in descending order

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106
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106
docs citations

106
times ranked

2137
citing authors

#	ARTICLE	IF	CITATIONS
1	Evaluation of fracture toughness of VN hard coatings: Effect of preferred orientation. Materials Chemistry and Physics, 2022, 275, 125253.	4.0	7
2	Evaluation of stress and energy relief efficiency of ZrN/Ti and ZrN/Zr. Surface and Coatings Technology, 2022, 434, 128224.	4.8	7
3	Effect of coating architecture on stress and energy relief efficiency of TiZrN coating on Si substrate. Thin Solid Films, 2022, 751, 139219.	1.8	4
4	Evaluation of incipient oxidation behavior of ZrO ₂ -Coated Zircaloy-4 by thermogravimetric analysis. Materials Chemistry and Physics, 2021, 262, 124317.	4.0	3
5	Effect of Ti interlayer thickness on mechanical properties and wear resistance of TiZrN coatings on AISI D2 steel. Surface and Coatings Technology, 2020, 394, 125690.	4.8	19
6	Texture evolution of vanadium nitride thin films. Thin Solid Films, 2019, 688, 137415.	1.8	22
7	Evaluation of the fracture toughness of Ti _{1-x} Zr _x N hard coatings: Effect of compositions. Surface and Coatings Technology, 2019, 358, 487-496.	4.8	12
8	Optimization of deposition processing of VN thin films using design of experiment and single-variable (nitrogen flow rate) methods. Materials Chemistry and Physics, 2019, 224, 246-256.	4.0	12
9	Oxidation behavior and corrosion resistance of vacuum annealed ZrN-coated stainless steel. Surface and Coatings Technology, 2019, 358, 308-319.	4.8	27
10	Effect of Ti interlayer on mechanical properties of TiZrN coatings on D2 steel. Surface and Coatings Technology, 2018, 350, 745-754.	4.8	21
11	Improved Current Drivability for Sub-20-nm N-FinFETs by Ge Pre-Amorphization in Contact With Reverse Retrograde Profile. IEEE Electron Device Letters, 2017, 38, 299-302.	3.9	6
12	The variation of grain structure and the enhancement of shear strength in SAC305-0.1Ni/OSP Cu solder joint. Materials Chemistry and Physics, 2017, 189, 76-79.	4.0	10
13	Measurement of residual stress on TiN/Ti bilayer thin films using average X-ray strain combined with laser curvature and nanoindentation methods. Materials Chemistry and Physics, 2017, 199, 185-192.	4.0	15
14	Effect of oxygen on fracture toughness of Zr(N,O) hard coatings. Surface and Coatings Technology, 2016, 304, 330-339.	4.8	14
15	Structure and Properties of Nanocrystalline (TiZr) _x N _{1-x} Thin Films Deposited by DC Unbalanced Magnetron Sputtering. Journal of Nanomaterials, 2016, 2016, 1-12.	2.7	6
16	Effect of bias on the structure and properties of TiZrN thin films deposited by unbalanced magnetron sputtering. Thin Solid Films, 2016, 618, 13-20.	1.8	27
17	In situ characterization of fracture toughness and dynamics of nanocrystalline titanium nitride films. Journal of Materials Research, 2016, 31, 370-379.	2.6	18
18	Ni/Te and Ni/Ag ₂ Te interfacial reactions. Materials Chemistry and Physics, 2016, 180, 396-403.	4.0	7

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19	Dynamic Strain Aging Behavior of Alloy 600 in a High Temperature Coolant Environment. Materials Transactions, 2015, 56, 1992-1999.	1.2	1
20	Microstructures, mechanical properties and oxidation behavior of vacuum annealed TiZrN thin films. Vacuum, 2015, 115, 12-18.	3.5	27
21	Determination of average X-ray strain (AXS) on TiN hard coatings using $\cos^2\psi\sin^2\psi$ X-ray diffraction method. Surface and Coatings Technology, 2015, 262, 40-47.	4.8	26
22	Low-Voltage Operation of ZrO ₂ -Gated n-Type Thin-Film Transistors Based on a Channel Formed by Hybrid Phases of SnO and SnO ₂ . ACS Applied Materials & Interfaces, 2015, 7, 15129-15137.	8.0	25
23	Residual stress measurement on TiN thin films by combing nanoindentation and average X-ray strain (AXS) method. Surface and Coatings Technology, 2015, 280, 43-49.	4.8	23
24	Influence of ion bombardment on structure and properties of TiZrN thin film. Applied Surface Science, 2015, 354, 155-160.	6.1	9
25	Fracture toughness measurement on TiN hard coatings using internal energy induced cracking. Surface and Coatings Technology, 2014, 239, 20-27.	4.8	34
26	Evaluation of fracture toughness of ZrN hard coatings by internal energy induced cracking method. Surface and Coatings Technology, 2014, 258, 211-218.	4.8	18
27	Strain enhanced ferroelectric properties of multiferroic BiFeO ₃ /SrTiO ₃ superlattice structure prepared by radio frequency magnetron sputtering. Thin Solid Films, 2013, 539, 75-80.	1.8	7
28	An Adaptive Receiver Design for OFDM Systems Using Conjugate Transmission. IEEE Transactions on Communications, 2013, 61, 599-608.	7.8	26
29	Enhancement of epitaxial LaNiO ₃ electrode on the ferroelectric property of La-doped BiFeO ₃ /SrTiO ₃ artificial superlattice structure by rf sputtering. Journal of Crystal Growth, 2013, 368, 1-5.	1.5	7
30	The structure and ferroelectric property of La-doped BiFeO ₃ /SrTiO ₃ artificial superlattice structure by rf sputtering: Effect of deposition temperature. Thin Solid Films, 2013, 529, 85-88.	1.8	12
31	High Energy X-Ray Diffraction Study of the Inhomogeneous Zr ₄₃ Cu ₄₃ Al ₇ Ag ₇ Bulk Metallic Glasses. Advanced Engineering Materials, 2013, 15, 287-294.	3.5	2
32	An Improved Adaptive Receiver for OFDM Systems Using Conjugate Transmission. , 2011, , .		3
33	Growth of BiFeO ₃ /SrTiO ₃ artificial superlattice structure by RF sputtering. Journal of Crystal Growth, 2011, 334, 90-95.	1.5	12
34	Phase transition and mechanical properties of Zr _{Nx} O _y thin films on AISI 304 stainless steel. Surface and Coatings Technology, 2011, 206, 107-116.	4.8	20
35	Structure evolution and mechanical properties of Zr _{Nx} O _y thin film deposited on Si by magnetron sputtering. Surface and Coatings Technology, 2011, 205, 5093-5102.	4.8	16
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37	Structure and properties of nanocrystalline ZrN _x O _y thin films: Effect of the oxygen content and film thickness. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2011, 29, .	2.1	6
38	Effect of nitrogen flow rate on properties of nanostructured TiZrN thin films produced by radio frequency magnetron sputtering. <i>Thin Solid Films</i> , 2010, 518, 7308-7311.	1.8	42
39	Microstructure and corrosion resistance of nanocrystalline TiZrN films on AISI 304 stainless steel substrate. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2010, 28, 774-778.	2.1	19
40	Strong asymmetric effect of lattice mismatch on epilayer structure in thin-film deposition. <i>Physical Review B</i> , 2009, 79, .	3.2	12
41	The effect of hydrogen charging on Ln-based amorphous materials. <i>Applied Physics Letters</i> , 2009, 95, 241901.	3.3	8
42	Microstructure study of a nanocrystalline two-phase ZrN _x O _y thin film. <i>Materials Chemistry and Physics</i> , 2009, 116, 503-506.	4.0	6
43	Hardness and residual stress in nanocrystalline ZrN films: Effect of bias voltage and heat treatment. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2009, 500, 104-108.	5.6	105
44	Determination of Young's modulus and Poisson's ratio of thin films by combining sin ² ψ X-ray diffraction and laser curvature methods. <i>Thin Solid Films</i> , 2009, 517, 6759-6766.	1.8	22
45	Heat treatment induced phase separation and phase transformation of ZrN _x O _y thin films deposited by ion plating. <i>Surface and Coatings Technology</i> , 2009, 203, 3491-3500.	4.8	15
46	Nonvolatile Memory With TiN Nanocrystals Three-Dimensionally Embedded in Si_3N_4 Formed by Spinodal Phase Segregation. <i>IEEE Electron Device Letters</i> , 2009, 30, 617-619.	3.9	2
47	Mechanical properties and corrosion resistance of nanocrystalline ZrN _x O _y coatings on AISI 304 stainless steel by ion plating. <i>Surface and Coatings Technology</i> , 2008, 202, 4992-5000.	4.8	34
48	Enhanced visible-light absorption in heavily nitrogen-doped TiO ₂ . <i>Philosophical Magazine Letters</i> , 2008, 88, 231-238.	1.2	8
49	Synthesis and characterization of nanocrystalline ZrN _x O _y thin films on Si by ion plating. <i>Surface and Coatings Technology</i> , 2007, 201, 6404-6413.	4.8	32
50	Effect of film thickness and Ti interlayer on the structure and properties of nanocrystalline TiN thin films on AISI D2 steel. <i>Surface and Coatings Technology</i> , 2007, 201, 7043-7053.	4.8	54
51	Effect of nitrogen flow rate on the structure and mechanical properties of ZrN thin films on Si(100) and stainless steel substrates. <i>Materials Chemistry and Physics</i> , 2007, 102, 31-38.	4.0	54
52	Nanohardness of nanocrystalline TiN thin films. <i>Surface and Coatings Technology</i> , 2006, 200, 3868-3875.	4.8	86
53	Heat treatment of nanocrystalline TiN films deposited by unbalanced magnetron sputtering. <i>Surface and Coatings Technology</i> , 2006, 200, 4291-4299.	4.8	34
54	Effect of Ti interlayer on the residual stress and texture development of TiN thin films. <i>Surface and Coatings Technology</i> , 2006, 200, 5937-5945.	4.8	44

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55	Effect of Ti interlayer on the residual stress and texture development of TiN thin films deposited by unbalanced magnetron sputtering. <i>Surface and Coatings Technology</i> , 2006, 201, 3199-3204.	4.8	28
56	Effect of nitrogen flow rate on structure and properties of nanocrystalline TiN thin films produced by unbalanced magnetron sputtering. <i>Surface and Coatings Technology</i> , 2005, 191, 17-24.	4.8	107
57	Effect of film thickness on the structure and properties of nanocrystalline ZrN thin films produced by ion plating. <i>Surface and Coatings Technology</i> , 2005, 195, 204-213.	4.8	40
58	Texture evolution of transition-metal nitride thin films by ion beam assisted deposition. <i>Thin Solid Films</i> , 2004, 446, 184-193.	1.8	44
59	Effect of substrate bias on the structure and properties of ion-plated ZrN on Si and stainless steel substrates. <i>Materials Chemistry and Physics</i> , 2003, 77, 14-21.	4.0	41
60	Optimization of the deposition process of ZrN and TiN thin films on Si(1 0 0) using design of experiment method. <i>Materials Chemistry and Physics</i> , 2003, 82, 228-236.	4.0	42
61	Corrosion resistance of ZrN films on AISI 304 stainless steel substrate. <i>Surface and Coatings Technology</i> , 2003, 167, 59-67.	4.8	82
62	Effect of heat treatment on the structure and properties of ion-plated TiN films. <i>Surface and Coatings Technology</i> , 2003, 168, 43-50.	4.8	34
63	Pinhole Enlargement during Electrochemical Porosity Measurement. <i>Corrosion</i> , 2002, 58, 846-848.	1.1	0
64	Comparison of electrochemical porosity test methods for TiN-coated stainless steel. <i>Surface and Coatings Technology</i> , 2002, 150, 309-318.	4.8	17
65	Bias effect of ion-plated zirconium nitride film on Si(100). <i>Thin Solid Films</i> , 2002, 405, 162-169.	1.8	62
66	Characterizing the effects of multiprocess parameters on the preferred orientation of TiN coating using a combined index. <i>Vacuum</i> , 2002, 66, 19-25.	3.5	13
67	Mechanical properties of TiN thin film coatings on 304 stainless steel substrates. <i>Surface and Coatings Technology</i> , 2002, 149, 7-13.	4.8	197
68	On the porosity of TiN films deposited by HCD ion plating. <i>Surface and Coatings Technology</i> , 2002, 155, 239-244.	4.8	8
69	Residual stress measurement in textured thin film by grazing-incidence X-ray diffraction. <i>Thin Solid Films</i> , 2002, 418, 73-78.	1.8	236
70	Corrosion behavior of TiN-coated 304 stainless steel. <i>Corrosion Science</i> , 2001, 43, 2023-2035.	6.6	60
71	Deposition of TiN thin films on Si(100) by HCD ion plating. <i>Surface and Coatings Technology</i> , 2001, 140, 206-214.	4.8	79
72	Role of process parameters in the texture evolution of TiN films deposited by hollow cathode discharge ion plating. <i>Surface and Coatings Technology</i> , 2001, 141, 156-163.	4.8	32

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73	A study of preferred orientation of vanadium nitride and zirconium nitride coatings on silicon prepared by ion beam assisted deposition. <i>Surface and Coatings Technology</i> , 2000, 133-134, 289-294.	4.8	50
74	A tensile-film-cracking model for evaluating interfacial shear strength of elastic film on ductile substrate. <i>Surface and Coatings Technology</i> , 2000, 126, 91-95.	4.8	69
75	Low energy ion beam assisted deposition of TiN thin films on silicon. <i>Scripta Materialia</i> , 2000, 42, 573-579.	5.2	21
76	Corrosion behavior and adhesion of ion-plated TiN films on AISI 304 steel. <i>Materials Chemistry and Physics</i> , 2000, 65, 310-315.	4.0	56
77	In situ observation of the cracking behavior of TiN coating on 304 stainless steel subjected to tensile strain. <i>Thin Solid Films</i> , 1999, 352, 173-178.	1.8	88
78	On the corrosion behavior of TiN-coated AISI D2 steel. <i>Surface and Coatings Technology</i> , 1999, 111, 16-21.	4.8	50
79	Effect of processing parameters on the microstructure and mechanical properties of TiN film on stainless steel by HCD ion plating. <i>Thin Solid Films</i> , 1999, 355-356, 440-445.	1.8	33
80	Ion beam assisted deposition of TiN thin film on Si (100). <i>Materials Chemistry and Physics</i> , 1999, 59, 49-56.	4.0	11
81	Microstructure and Hardness of Hollow Cathode Discharge Ion-Plated Titanium Nitride Film. <i>Journal of Materials Engineering and Performance</i> , 1998, 7, 324-328.	2.5	51
82	Microstructure and coating properties of ion-plated TiN on type 304 stainless steel. <i>Thin Solid Films</i> , 1998, 334, 125-132.	1.8	27
83	Hydrogen-induced subcritical crack growth in Ti-6Al-4V alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1998, 242, 96-107.	5.6	11
84	Mechanical properties of ion-plated TiN films on AISI D2 steel. <i>Surface and Coatings Technology</i> , 1998, 110, 111-119.	4.8	48
85	Characterization of the ion-plated TiN on AISI 304 stainless steel by energy filtering transmission electron microscopy. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1997, 15, 2318-2322.	2.1	4
86	Control of the corrosion resistance of TiN-coated AISI 304 stainless steel. <i>Corrosion Science</i> , 1997, 39, 893-899.	6.6	19
87	Internal hydrogen-induced subcritical crack growth in Ti6Al4V. <i>Scripta Materialia</i> , 1997, 36, 1415-1421.	5.2	7
88	Microstructure, chemistry and coating properties of ion-plated TiN on type 304 stainless steel. <i>Materials Chemistry and Physics</i> , 1997, 50, 248-255.	4.0	12
89	Subcritical crack growth behavior for hydrided Zircaloy-4 plate. <i>Materials Chemistry and Physics</i> , 1997, 47, 184-192.	4.0	17
90	Internal hydrogen embrittlement of a ferritic stainless steel. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 1995, 26, 845-849.	2.2	13

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91	Cracking of duplex stainless steel due to dissolved hydrogen. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1995, 26, 1079-1085.	2.2	23
92	Effect of hydrogen contents on the mechanical properties of Zircaloy-4. Journal of Nuclear Materials, 1994, 208, 166-179.	2.7	53
93	Aging embrittlement and lattice image analysis in a Fe-Cr-Ni duplex stainless steel aged at 400°C. Journal of Nuclear Materials, 1994, 217, 269-278.	2.7	64
94	Effect of hydrogen gas on the mechanical properties of a zirconium alloy. Materials Chemistry and Physics, 1994, 38, 138-145.	4.0	12
95	Reply to comment on "the ductile-brittle transition of a zirconium alloy due to hydrogen". Scripta Metallurgica Et Materialia, 1994, 30, 1239-1240.	1.0	0
96	Hydriding of zirconium alloys in hydrogen gas. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1993, 161, 247-253.	5.6	18
97	The ductile-brittle transition of a zirconium alloy due to hydrogen. Scripta Metallurgica Et Materialia, 1993, 28, 1537-1542.	1.0	12
98	Phase transformations in ferrite phase of a duplex stainless steel aged at 500°C. Scripta Metallurgica Et Materialia, 1993, 29, 1451-1456.	1.0	3
99	Evidence for discontinuous crack growth in delayed hydride cracking of a zirconium alloy. Scripta Metallurgica Et Materialia, 1992, 27, 1247-1251.	1.0	4
100	Internal hydrogen-induced subcritical crack growth in austenitic stainless steels. Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science, 1991, 22, 2605-2618.	1.4	36
101	The fracture and shear band formation in an Al _{1-x} Cu _x -Li _{1-x} Mg _x -Zr alloy. Acta Metallurgica, 1986, 34, 1657-1662.	2.1	29