Ying-liang Cheng

List of Publications by Year
in descending order

39 papers	1,944 citations	218592 26 h-index	302012 39 g-index
39 all docs	39 docs citations	39 times ranked	1089 citing authors

#	Article	IF	Citations
1	New findings on properties of plasma electrolytic oxidation coatings from study of an Alâ€“Cuâ€“Li alloy. Electrochimica Acta, 2013, 107, 358-378.	2.6	170
2	Comparison of corrosion behaviors of AZ31, AZ91, AM60 and ZK60 magnesium alloys. Transactions of Nonferrous Metals Society of China, 2009, 19, 517-524.	1.7	155
3	Microstructure, corrosion and wear performance of plasma electrolytic oxidation coatings formed on Tiâ€“6Alâ€“4V alloy in silicate-hexametaphosphate electrolyte. Surface and Coatings Technology, 2013, 217, 129-139.	2.2	95
4	An improvement of the wear and corrosion resistances of AZ31 magnesium alloy by plasma electrolytic oxidation in a silicateâ€“hexametaphosphate electrolyte with the suspension of SiC nanoparticles. Surface and Coatings Technology, 2015, 276, 266-278.	2.2	94
5	The effects of anion deposition and negative pulse on the behaviours of plasma electrolytic oxidation (PEO)â€”A systematic study of the PEO of a Zirlo alloy in aluminate electrolytes. Electrochimica Acta, 2017, 225, 47-68.	2.6	94
6	The influences of microdischarge types and silicate on the morphologies and phase compositions of plasma electrolytic oxidation coatings on Zircaloy-2. Corrosion Science, 2012, 59, 307-315.	3.0	92
7	The anodization of ZK60 magnesium alloy in alkaline solution containing silicate and the corrosion properties of the anodized films. Applied Surface Science, 2007, 253, 9387-9394.	3.1	82
8	High growth rate, wear resistant coatings on an Alâ€“Cuâ€“Li alloy by plasma electrolytic oxidation in concentrated aluminate electrolytes. Surface and Coatings Technology, 2015, 269, 74-82.	2.2	74
9	Comparison of plasma electrolytic oxidation of zirconium alloy in silicate- and aluminate-based electrolytes and wear properties of the resulting coatings. Electrochimica Acta, 2012, 85, 25-32.	2.6	67
10	Wear-resistant coatings formed on Zircaloy-2 by plasma electrolytic oxidation in sodium aluminate electrolytes. Electrochimica Acta, 2014, 116, 453-466.	2.6	67
11	A comparison of plasma electrolytic oxidation of Ti-6Al-4V and Zircaloy-2 alloys in a silicate-hexametaphosphate electrolyte. Electrochimica Acta, 2015, 165, 301-313.	2.6	67
12	Wear and corrosion resistant coatings on surface of cast A356 aluminum alloy by plasma electrolytic oxidation in moderately concentrated aluminate electrolytes. Transactions of Nonferrous Metals Society of China, 2017, 27, 336-351.	1.7	66
13	The black and white coatings on Ti-6Al-4V alloy or pure titanium by plasma electrolytic oxidation in concentrated silicate electrolyte. Applied Surface Science, 2018, 428, 684-697.	3.1	66
14	Key factors determining the development of two morphologies of plasma electrolytic coatings on an Alâ€“Cuâ€“Li alloy in aluminate electrolytes. Surface and Coatings Technology, 2016, 291, 239-249.	2.2	65
15	Characterization of plasma electrolytic oxidation coatings on Zircaloy-4 formed in different electrolytes with AC current regime. Electrochimica Acta, 2011, 56, 8467-8476.	2.6	64
16	Plasma electrolytic oxidation of an Al-Cu-Li alloy in alkaline aluminate electrolytes: A competition between growth and dissolution for the initial ultra-thin films. Electrochimica Acta, 2014, 138, 417-429.	2.6	61
17	Plasma electrolytic oxidation of AZ31 magnesium alloy in aluminate-tungstate electrolytes and the coating formation mechanism. Journal of Alloys and Compounds, 2017, 725, 199-216.	2.8	61
18	Phosphating process of AZ31 magnesium alloy and corrosion resistance of coatings. Transactions of Nonferrous Metals Society of China, 2006, 16, 1086-1091.	1.7	39

#	Article	IF	Citations
19	A re-understanding of the breakdown theory from the study of the plasma electrolytic oxidation of a carbon steel â€" A non-valve metal. Electrochimica Acta, 2018, 284, 681-695.	2.6	39
20	Dual-Carbon Electrode-Based High-Energy-Density Potassium-Ion Hybrid Capacitor. ACS Applied Materials & Interfaces, 2021, 13, 8497-8506.	4.0	39
21	The formation of metallic W and amorphous phase in the plasma electrolytic oxidation coatings on an Al alloy from tungstate-containing electrolyte. Surface and Coatings Technology, 2019, 361, 176-187.	2.2	38
22	Plasma electrolytic oxidation of brass. Surface and Coatings Technology, 2020, 385, 125366.	2.2	34
23	A study on the electrocodeposition processes and properties of Niâ€"SiC nanocomposite coatings. Journal of Coatings Technology Research, 2011, 8, 409-417.	1.2	33
24	A significant improvement of the wear resistance of Ti6Al4V alloy by a combined method of magnetron sputtering and plasma electrolytic oxidation (PEO). Surface and Coatings Technology, 2019, 358, 879-890.	2.2	32
25	Effect of frequency on black coating formation on AZ31 magnesium alloy by plasma electrolytic oxidation in aluminate-tungstate electrolyte. Surface and Coatings Technology, 2019, 372, 34-44.	2.2	31
26	Potential and morphological transitions during bipolar plasma electrolytic oxidation of tantalum in silicate electrolyte. Ceramics International, 2020, 46, 13385-13396.	2.3	29
27	Anodization of AZ91 magnesium alloy in alkaline solution containing silicate and corrosion properties of anodized films. Transactions of Nonferrous Metals Society of China, 2008, 18, 722-727.	1.7	23
28	Plasma electrolytic oxidation of zircaloy-4 alloy with DC regime and properties of coatings. Transactions of Nonferrous Metals Society of China, 2012, 22, 1638-1646.	1.7	23
29	The synthesis of micro and nano WO 3 powders under the sparks of plasma electrolytic oxidation of Al in a tungstate electrolyte. Ceramics International, 2018, 44, 10402-10411.	2.3	21
30	One-step fabrication of double-layer nanocomposite coating by plasma electrolytic oxidation with particle addition. Applied Surface Science, 2022, 592, 153043.	3.1	19
31	Amorphous coatings on tantalum formed by plasma electrolytic oxidation in aluminate electrolyte and high temperature crystallization treatment. Surface and Coatings Technology, 2022, 434, 128171.	2.2	18
32	Corrosion and wear resistance of AZ31 Mg alloy treated by duplex process of magnetron sputtering and plasma electrolytic oxidation. Transactions of Nonferrous Metals Society of China, 2021, 31, 2287-2306.	1.7	16
33	Plasma electrolytic oxidation of copper in an aluminate based electrolyte with the respective additives of Na3PO4, NaH2PO4 and NaH2PO2. Applied Surface Science, 2021, 565, 150477.	3.1	16
34	Fast-Charging Nonaqueous Potassium-Ion Batteries Enabled by Rational Construction of Oxygen-Rich Porous Nanofiber Anodes. ACS Applied Materials & Interfaces, 2021, 13, 50005-50016.	4.0	15
35	Microstructure evolution and corrosion resistance improvement of Mgâ€"Gdâ€"Yâ€"Znâ€"Zr alloys via surface hydrogen treatment. Corrosion Science, 2021, 191, 109746.	3.0	12
36	Effect of electrodeposition temperature on the thin films of ZnO nanoparticles used for photocathodic protection of SS304. Journal of Electroanalytical Chemistry, 2021, 881, 114945.	1.9	8

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37	Effect of NaOH on plasma electrolytic oxidation of A356 aluminium alloy in moderately concentrated aluminate electrolyte. Transactions of Nonferrous Metals Society of China, 2021, 31, 3677-3690.	1.7	8
38	An in-depth study of photocathodic protection of SS304 steel by electrodeposited layers of ZnO nanoparticles. Surface and Coatings Technology, 2020, 399, 126158.	2.2	7
39	Highly increased breakdown potential of anodic films on aluminum using a sealed porous layer. Journal of Solid State Electrochemistry, 2018, 22, 2073-2081.	1.2	4